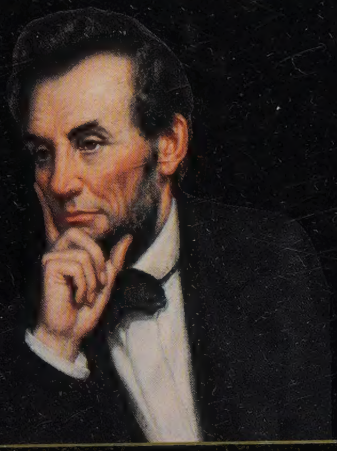
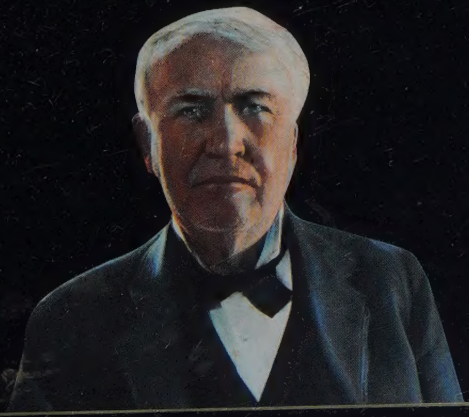
World's Greatest BIOGRAPHIES



Abraham Lincoln

Winston Churchill



Thomas Edison

ABRAHAM LINCOLN

To most Americans he is a mythic figure whose careworn image graces stamps, statues, and courthouse walls. But to his contemporaries Lincoln was a vital, energetic *young* man—one of the youngest Presidents ever—whose family charmed the nation despite the historic political crisis that loomed ahead. And while his greatness is now undisputed, Lincoln spent his life as a flesh-and-blood politician—plagued by self-doubt, besieged by critics, and at the mercy of inconstant supporters. The way this flawed giant surmounted his own limitations to preserve the Union, emancipate the slaves, and save "the last, best hope of Earth" is one of the great stories of our age.

WINSTON CHURCHILL

Statesman, orator, wartime symbol of Britain's indomitable spirit—this is the Winston Churchill the world remembers best. But there is a less familiar one as well—the boy of privilege with a larger-than-life personality and a poor grasp of Latin; the young soldier fighting in India and Africa at the end of the colonial era; the war correspondent captured behind enemy lines during the Boer War. Here, in his own words, is a look at the early life of one of the twentieth century's pivotal figures, told with wit and grace in the unmistakable prose style that would one day move the world.

World's Greatest BIOGRAPHIES

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Selected and Edited by Reader's Digest

World's Greatest
BIOGRAPHIES

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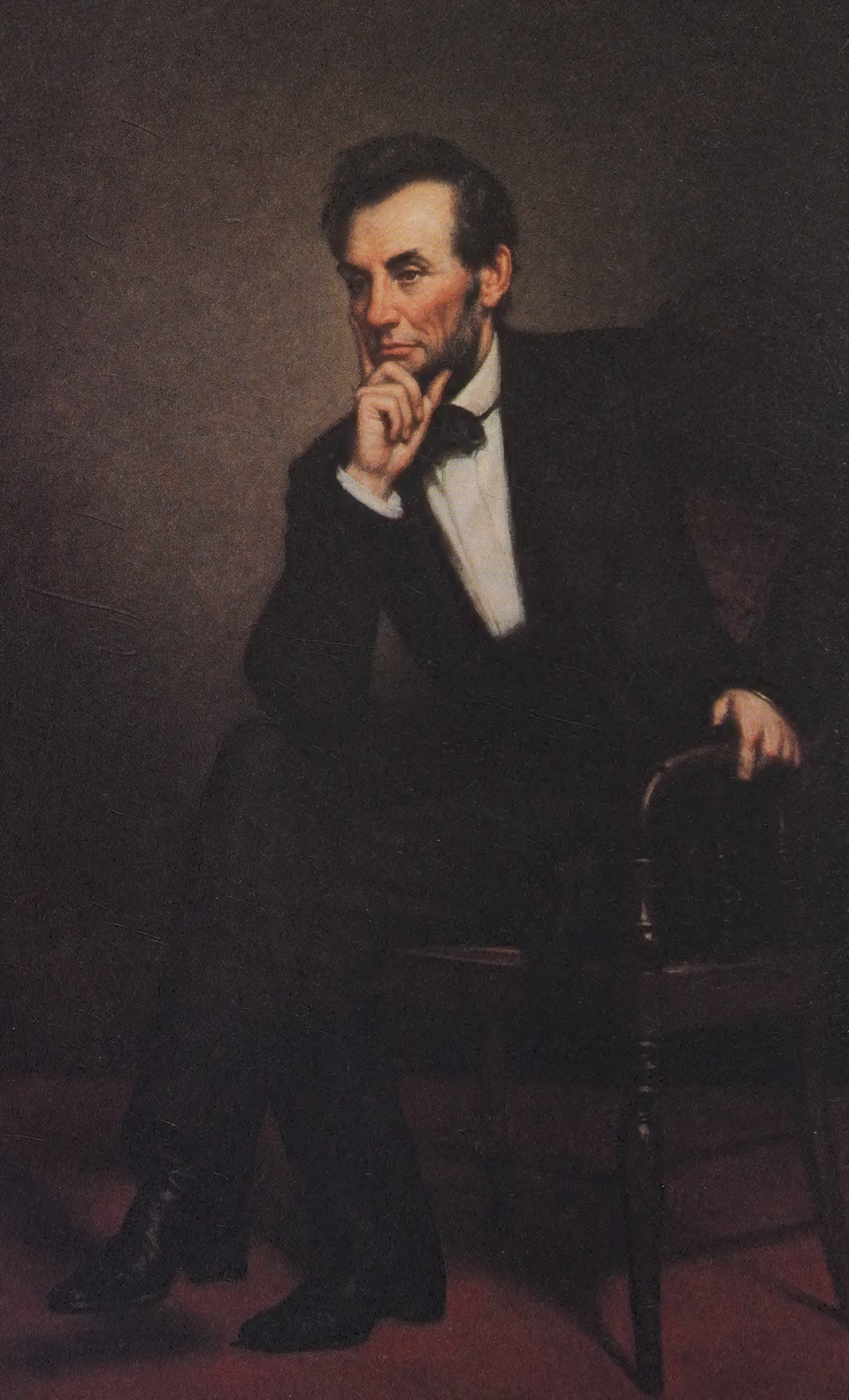
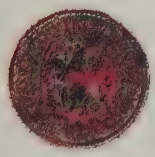


Abraham Lincoln



A Select Edition of

LINCOLN

by David Herbert Donald

"With malice toward none; with charity for all;
with firmness in the right, as God gives us to see the right,
let us strive on to finish the work we are in . . ."

ABRAHAM LINCOLN

PREFACE

The only time I ever met President John F. Kennedy, in February 1962, he was unhappy with historians. A group of scholars had been in the Oval Office hoping to enlist him in a poll that ranked American Presidents. I was not one of those visitors, but the next day, when I gave a talk in the White House about Abraham Lincoln, the subject was much on his mind. He voiced his deep dissatisfaction with the glib way the historians had rated some of his predecessors as "below average" and marked a few as "failures." With real feeling he said, "No one has a right to grade a President—not even James Buchanan—who has not sat in his chair, examined the mail and information that came across his desk, and learned why he made his decisions."

This book was conceived in the spirit of President Kennedy's observations. In tracing the life of Abraham Lincoln, I have asked at every stage of his career what he knew when he had to take critical actions, how he evaluated the evidence before him, and why he reached his decisions.

This, then, is a biography written from Lincoln's point of view, using information and ideas available to him. It seeks to explain rather than to judge. There is, for example, almost nothing in the following pages about the internal affairs of the Confederacy, because these were matters that Lincoln could not know about. It is not a military history. I have not described campaigns and battles Lincoln did not witness.

In focusing closely on Lincoln himself, I have produced, perhaps, a more grainy portrait than most, giving more attention to his unquenchable ambition, to his brain-numbing labor in his law practice, to his tempestuous married life, and to his repeated defeats. It suggests how often chance, or accident, played a role in shaping his life. And it emphasizes his enormous capacity for growth, which enabled one of the least experienced men ever elected to high office to become the greatest American President.

More important, this biography highlights a basic trait of character evident throughout Lincoln's life: the essential passivity of his nature. Lincoln recognized it in a letter he wrote in 1864 to a fellow Kentuckian who asked him to explain why he had shifted from his inaugural pledge not to interfere with slavery to a policy of emancipation. After relating how circumstances had obliged him to change his mind—how emancipation and the use of African American soldiers had become military necessities—the President concluded, "In telling this tale I attempt no compliment to my own sagacity. I claim not to have controlled events, but confess plainly that events have controlled me."

From his earliest days Lincoln had a sense that his destiny was controlled by some larger force, some higher power. He frequently quoted the lines from *Hamlet:*

> There's a divinity that shapes our ends,
> Rough-hew them how we will.

From Lincoln's fatalism derived some of his most lovable traits: his compassion, his tolerance, his willingness to overlook mistakes. That belief did not, of course, lead him to lethargy or dissipation. Like thousands of Calvinists who believed in predestination, he worked indefatigably for a better world—for himself, for his family, and for his nation. This helped to buffer the many reverses that he experienced.

It also made for a pragmatic approach to problems, a recognition that if one solution was fated not to work, another could be tried. "My policy is to have no policy" became a kind of

motto for Lincoln—a motto that infuriated the sober, doctrinaire people around him who were inclined to think he had no principles either. He might have offended his critics less if he had more often used the analogy he once gave when explaining his course on reconstruction: "The pilots on our Western rivers steer from *point to point* as they call it—setting the course of the boat no farther than they can see; and that is all I propose to myself in this great problem."

ONE

Annals of the Poor

Abraham Lincoln was not interested in his ancestry. In his mind he was a self-made man who had no need to care about his family tree. In 1860, when a Chicago newspaperman proposed to write his campaign biography, Lincoln told him, "It is a great piece of folly to attempt to make anything out of my early life. It can all be condensed into a single sentence, and that sentence you will find in Gray's Elegy, 'The short and simple annals of the poor.'"*

Lincoln knew almost nothing about his mother's family, the Hankses, who moved from Virginia to Kentucky around 1780. Their family tree is hard to trace because they tended to name all the males James or John, and the females, Polly, Lucy, or Nancy. Abraham Lincoln's mother was one of at least eight Nancy Hankses born during the 1780s. Lincoln believed she was illegitimate. It was a subject he rarely discussed, but in the early 1850s, while driving his one-horse buggy from Springfield to Petersburg, Illinois, he talked about it. He and his law partner, William H. Herndon, were about to try a case that involved a question of hereditary traits, and Lincoln observed that illegitimate children were "oftentimes sturdier and brighter than those born in lawful wedlock." To prove his point, he men-

*In the interest of accuracy, most material quoted by the author follows the spelling and punctuation of his original sources.—The Editors

tioned that his mother was "the illegitimate daughter of Lucy Hanks and a well-bred Virginia farmer or planter." From "this broad-minded, unknown Virginian," Lincoln believed he inherited traits that distinguished him from other family members: ambition, mental alertness, and the power of analysis.

Of his Lincoln ancestors, he knew only a little more than he did about the Hankses. His grandfather Abraham, for whom he was named, had moved from Virginia to Kentucky in the early 1780s. The Lincolns had heard of the rich lands in Kentucky from their distant relative Daniel Boone, and they found in that largely unsettled territory all the opportunities Boone had promised. Within a few years they owned at least 5,544 acres of land in the richest sections of Kentucky.

But the wilderness was dangerous. In 1786, while Abraham Lincoln and his three boys—Mordecai, Josiah, and Thomas—were planting corn, Indians attacked. Abraham was killed instantly. Mordecai, fifteen and the oldest son, sent Josiah running to the settlement half a mile away for help while he raced to a nearby cabin. Peering out of a crack between logs, he saw an Indian sneaking out of the forest toward his eight-year-old brother, Thomas, sitting in the field beside their father's body. Mordecai picked up a rifle, aimed, and killed the Indian. Thomas Lincoln repeated this story over and over in later years, so that it became, as his son Abraham said, "the legend more strongly than all others imprinted upon my mind and memory."

Both Thomas Lincoln and his son seemed to have overlooked the economic consequences of the tragedy. According to Virginia law, which prevailed in the Kentucky region, Mordecai Lincoln, the oldest son, inherited his father's entire estate. The only Lincoln relative Abraham ever knew, Mordecai was a man of considerable wit and great natural gifts, and his nephew once remarked that "Uncle Mord had run off with all the talents of the family." He had also, in effect, run off with all the money. Left without a patrimony, the other two Lincoln boys had to fend for themselves.

Abraham Lincoln never fully understood how hard his father had to struggle during his early years. It required an immense

effort for Thomas, who earned three shillings a day for manual labor, to accumulate enough money to buy his first farm, a 238-acre tract in Hardin County, Kentucky. He became a familiar figure in Elizabethtown and Hogdenville, a stocky, well-built man of no more than average height, with a shock of straight black hair and an unusually large nose. "Honest" was the adjective most frequently used to describe him.

In 1806 Thomas Lincoln married Nancy Hanks, and the couple built a little house in Elizabethtown, where eight months later Sarah, their first child, was born. By 1809 he had bought another farm, this time one of 300 acres. On a little knoll near a spring, he built a one-room log cabin measuring sixteen by eighteen feet. Here Abraham Lincoln was born on February 12, 1809. He had no recollection of the place of his birth, because his parents moved before he was two.

The land on the farm proved very poor, so Thomas bought a smaller but more fertile farm, some ten miles to the northeast. Here, once again, the family lived in a one-room log cabin. But the setting was beautiful, and it was of this Knob Creek farm that Lincoln had his earliest memories. Few of them, however, concerned his mother, who remains a shadowy image. Years later those who had known her described her variously as being tall or of average height, thin or stout, beautiful or plain. Most agreed she was "brilliant" or "intellectual." According to tradition, she was able to read, but like many frontier women, she did not know how to write and had to sign legal documents with an X. Of her life on Knob Creek, Lincoln recorded only that she gave birth to a third child, named Thomas, who died in infancy. In later years when Abraham mentioned her, he referred to his "angel mother," partly in recognition of her loving affection, but partly to distinguish her from his stepmother, who was very much alive.

Lincoln's Knob Creek recollections were of working in what he called the big field, where his father planted corn and the son followed, dropping pumpkinseeds in every other row. He also remembered going for two brief periods to an "A.B.C. school," some two miles from the Lincolns' cabin.

In general, young Lincoln seems to have been an entirely average little boy who enjoyed playing, hunting, and fishing. As a relative declared, "Abe exhibited no special traits in K[entuck]y except a good kind—somewhat wild nature."

In 1816, when Abraham was seven, the Lincolns moved across the Ohio River to Indiana. Many years later he stated, quite accurately, that his father left Kentucky "partly on account of slavery; but chiefly on account of the difficulty in land titles in Ky." In Thomas Lincoln's mind the two causes were interrelated. As a Separate Baptist, whose members adhered to a very strict code of morality, he had religious grounds for disliking slavery. But his hostility to slavery had an economic basis as well. He did not want to compete with slave labor. Kentucky had been admitted to the Union in 1792 as a slave state, and by 1811 Hardin County had 1,007 slaves and only 1,627 white males over the age of sixteen.

Small farmers like Thomas Lincoln also worried about the titles to their land. Kentucky never had a United States land survey; settlers fixed their own bounds to the properties they claimed: a particular tree here, a rock there, and so on. Soon nobody could be sure who owned what. Thomas Lincoln had trouble gaining a clear title to any of his three farms. Having neither the money nor the inclination to fight for his claims in court, he heard with great interest of the opening of Indiana, a territory from which slavery had been excluded by the Northwest Ordinance. Here the United States government had surveyed the land and offered guaranteed titles.

In the fall of 1816 Thomas made a trip across the Ohio to explore the region. After selecting a site in the heavily wooded wilderness on Pigeon Creek, in Perry (later Spencer) County, in southern Indiana, he constructed what was called a half-faced camp, a rough shelter enclosed on three sides but open on the fourth. He blazed trees to mark the boundaries, then returned to Kentucky, gathered his small family, and set out for his new home. The Lincolns arrived in Indiana just as the territory was admitted to the Union as a state.

They stayed in the half-faced camp for a few days until Thomas, probably with help from the seven other families in the vicinity, built a proper log cabin. It offered more protection in this wild region, and the family got through the winter by eating deer and bear meat.

The immediate task before the Lincolns was to clear away trees so they could plant corn. Though Abraham was only eight, he was, he recalled, "large of his age, and had an axe put into his hands at once."

That first year in Indiana was a time of backbreaking toil and desperate loneliness for all the family, but by fall they were fairly settled. Thomas was so satisfied with the site that he made initial payments on two adjoining 80-acre tracts. Nancy also began to feel more at home because Elizabeth (Hanks) and Thomas Sparrow, her aunt and uncle, came to the Pigeon Creek neighborhood. Sarah and Abraham rejoiced because with the Sparrows came Elizabeth's nephew, eighteen-year-old Dennis Hanks, a young man of irrepressible good spirits.

But shortly afterward everything began to go wrong. The Pigeon Creek community was devastated by milk sickness (more properly, brucellosis), a mysterious ailment that settlers realized was somehow connected with the milk of their cows. It was not until many years later that scientists discovered that the cows, which ran wild in the forest, had been eating the poisonous white snakeroot plant. Dizziness and nausea were initial symptoms, followed by irregular respiration, prostration, and coma. Death usually occurred within seven days. Thomas and Elizabeth Sparrow were the first afflicted, and Thomas Lincoln sawed rough boards to make coffins to bury them in. Then Nancy fell ill. She died on October 5, and Thomas Lincoln buried another coffin on a wooded knoll a quarter of a mile from the cabin.

Abe—as the other children insisted on calling the boy, even though he always disliked the nickname—left no words describing his loss. But many years later he wrote a letter of condolence to a bereaved child: "In this sad world of ours, sorrow comes to all; and, to the young, it comes with bitterest agony,

because it takes them unawares. . . . I have had experience enough to know what I say."

Deeper consequences of the loss of his mother before he was eleven years old can only be a matter of speculation. It is tempting to trace his subsequent moodiness and his occasional bouts of depression to this cause, but the connections are not clear. Certainly the death of his mother, coming so soon after the deaths of other friends and neighbors, gave a gloomy cast to his memories of his Indiana home.

Thomas Lincoln recognized that he and his family could not go on alone, and within a year of Nancy's death he went back to Kentucky to seek a bride. In Elizabethtown he found Sarah Bush Johnston, the widowed mother of three. There was no time for a romantic engagement; he needed a wife and she needed a husband. They made a businesslike arrangement for him to pay her debts and for her to move with him to Indiana.

The arrival of Sarah Lincoln marked a turning point in Abraham Lincoln's life. She brought with her, first, her collection of domestic possessions: comfortable bedding, a walnut bureau, a spinning wheel, knives, forks, and spoons—unbelievable luxury to the Lincoln children. Her children—Elizabeth, John D., and Matilda, who ranged from nine to five years—brought excitement to the depressed Lincoln family. But most of all she brought with her the gift of love. She grew especially fond of Abraham; and Abraham, starved for affection, returned her love. He called her Mama, and he never spoke of her except in the most affectionate terms.

The years after Sarah Bush Lincoln came to Indiana were happy ones for young Abraham. His parents enrolled him, along with the other four children, in the school that Andrew Crawford, a justice of the peace, had opened about a mile from the Lincoln house. Run on a subscription basis, with parents paying their children's tuition in cash or commodities, it was a "blab" school; students recited their lessons aloud, and the schoolmaster listened through the din for errors.

After one term of perhaps three months, Crawford gave up teaching, and the Lincoln children had no school for a year, until a new one opened about four miles from their house. The distance was so great that Abraham, who had farm chores, could attend only sporadically. The next year, for about six months, he went to a school held in the same cabin Crawford had used. With that term, at the age of fifteen, his formal education ended. All told, he summarized, "the agregate of all his schooling did not amount to one year."

In later years Lincoln was scornful of these "schools, so called" that he attended: "No qualification was ever required of a teacher, beyond 'readin, writin, and cipherin.'"

Though his censure was largely deserved, a school system that produced Abraham Lincoln could not have been wholly without merit. Indeed, his teachers, untrained as they were, helped him master the basic tools so that he could educate himself. *Dilworth's Spelling-Book* provided his introduction to grammar and spelling. He also learned to write in a clear, round hand. The handwriting of a bit of doggerel in his sum book is recognizably that of the future President:

> Abraham Lincoln is my name
> And with my pen I wrote the same
> I wrote in both hast[e] and speed
> and left it here for fools to read.

So adept did he become that unlettered neighbors in the Pigeon Creek community often asked him to write letters for them.

Even more important was the ability to read. Once he got the hang of it, he could never get enough. He would carry a book with him when he went out to work, and read when he rested. John Hanks, another cousin who lived with the Lincolns for a time, remembered that when Abraham returned to the house from work, "he would go to the cupboard, snatch a piece of corn bread, take down a book, sit down in a chair, cock his legs up as high as his head, and read."

Other than classroom texts, his first books were the few that Sarah Bush Lincoln had brought from Kentucky. One was her family Bible. *The Pilgrim's Progress* was another, and the biblical cadences of Lincoln's later speeches owed much to its author, John Bunyan. Another of Sarah Bush Lincoln's books was *Aesop's Fables,* which, it was said, Abraham could write out from memory.

History also fascinated him. He probably read William Grimshaw's *History of the United States.* With a sharp denunciation of slavery Grimshaw stressed the importance of the American Revolution and exhorted students, "Let us not only declare by words, but demonstrate by our actions, that 'all men are created equal.'"

The pioneer schools of Indiana also gave Lincoln a good grounding in elementary mathematics. He liked the logic and precision of mathematics, and years later, after serving a term in Congress, he went back to the subject and worked his way through most of a geometry textbook.

What Lincoln learned from school was not all in books. Here for the first time he had a chance to pit his wits against children from other families. Taller than most, he wore a coonskin cap and buckskin pants that were always too short. Unconscious of his peculiar appearance, he would gather the other students around him, cracking jokes, telling stories, making plans. Almost from the beginning he took his place as a leader. In his classmates' eyes he was clearly exceptional, and he carried away from his brief schooling the self-confidence of a man who has never met his intellectual equal.

These happy years of Lincoln's boyhood were short, for his relationship with his father began to deteriorate. Thomas was under considerable financial pressure because he had to support a household of eight people. As Abraham became an adolescent, his father depended on him more and more for the farming necessary to keep the family afloat. He also hired his son out to work for other farmers, and by law he was entitled to everything the boy earned until he came of age.

Thomas Lincoln was generally an easygoing man and not a harsh father. He encouraged Abraham to go to school but thought his son spent too much time on his books. Dennis Hanks said that Thomas had "sometimes to slash him for neglecting his work by reading."

As Abraham became a teenager, he began to distance himself from his father. His sense of alienation may have originated at the time of his mother's death, when he needed more compassion than his stolid father was able to give. It increased as the boy got older. Perhaps he felt that his place in the household had been usurped by the second family Thomas Lincoln acquired when he remarried; contemporaries noted that Thomas seemed to favor the stepson, John D. Johnston. Then, too, Abraham disagreed with his father over religion. In 1823 Thomas Lincoln and his wife joined the Pigeon Baptist Church, but as Lincoln's stepmother said, "Abe had no particular religion—didn't think of these question[s] at that time, if he ever did." That difference appears to have led to the sharpest words he ever received from his father. Though Abraham did not belong to the church, he attended the sermons, and afterward, climbing on a tree stump, he would rally the other children around him and repeat—or parody—the minister's words. Offended, Thomas, as one of the children recalled, "would come and make him quit—send him to work."

The heavy chores he had to perform contributed to his dissatisfaction. The boy had limited energy because at about age twelve he began growing rapidly. By the time he was sixteen, he had shot up to six feet two. He grew so fast that he was tired all the time, and he showed a notable lack of enthusiasm for physical labor. "Lincoln was lazy—a very lazy man," Dennis Hanks concluded. "He was always reading—scribbling—writing—ciphering—writing Poetry."

But Abraham's pulling away from his father was more than teenage rebellion. Abraham had made a quiet reassessment of the life that Thomas lived. He kept his judgment to himself, but years later it crept into his scornful statements that his father "grew up, litterally without education," that he chose to settle

in a region where "there was absolutely nothing to excite ambition for education." In all his published writings and, indeed, in reports of hundreds of stories and conversations, he had not one favorable word to say about his father.

By the time Abraham Lincoln was in his late teens, he was itching to get away from Pigeon Creek. One after another his ties to home and community were snapped. When he was seventeen, his sister, Sarah, married a neighbor, Aaron Grigsby, and the couple set up housekeeping several miles from the Lincoln cabin. Then Matilda, Sarah Bush Lincoln's youngest daughter, married Squire Hall and also moved away. A year and a half later Sarah Lincoln Grigsby died in childbirth. Abraham blamed her death on the negligence of the Grigsbys in not sending for a doctor, and the ensuing quarrel further alienated him from his Pigeon Creek neighbors.

Increasingly, he began to go farther afield. At the age of sixteen he, together with Dennis Hanks and Squire Hall, got the idea of making money by selling firewood to the steamers plying the Ohio River. They set to work sawing logs, only to find that the demand was slack. They finally swapped nine cords of firewood for nine yards of white cloth, out of which, Hanks reported, "Abe had a shirt made." Next Lincoln hired out to James Taylor, who ran a ferry across the Ohio River. When he was not helping on the river, he plowed, killed hogs, and made fences, doing what he remembered as "the roughest work a young man could be made to do." He earned $6 a month, with 31 cents extra on days when he slaughtered hogs. In what spare time he had, he built a little flatboat. When two men asked him to row them out into the river so they could take passage on a steamer coming downstream, he sculled them out and lifted their trunks onto the deck. As they left, each tossed a silver half-dollar onto the floor of his boat. "I could scarcely credit that I, a poor boy, had earned a dollar in less than a day," Lincoln recalled nearly forty years later.

The lure of the river was irresistible. The next spring, when James Gentry, who owned the local store, decided to send a

cargo of meat, corn, and flour down the river for sale in New Orleans, Lincoln agreed to accompany Gentry's son, Allen, on the flatboat, at a wage of $8 a month. Returning to Indiana, he dutifully handed over his earnings to his father, but he began to spend more and more time away from home. In the village of Gentryville, about a mile and a half away, he helped out at James Gentry's store or worked with the local blacksmith. As always, Abraham was full of talk and jokes and tricks, and he gathered about him all the young men who were restless in the narrow society of southern Indiana.

Early in 1830 Abraham helped his father and stepmother move to Macon County, Illinois. John Hanks had already settled there and sent back glowing reports of the fertility of the Illinois soil. A rumor of a new outbreak of milk sickness in southern Indiana triggered Thomas Lincoln's decision to go. Selling his land, his hogs, and his corn, he gathered up his household and, in a wagon drawn by two yoke of oxen, started off for a tract of land on the north bank of the Sangamon River, which John Hanks had staked out for them. That summer the men broke up 15 acres, and Abraham and John split the rails to fence them in. Abraham already felt so at home in Illinois that he signed a petition asking for a change of polling place for elections.

That summer, too, he made his first political speech, addressing a campaign meeting in front of Renshaw's store in Decatur. Two candidates for the state legislature made addresses, and when they failed to follow custom and offer the crowd something to drink, the boys about the store urged Lincoln to reply, expecting him to ridicule the candidates' stinginess. But Abraham had for several years been reading anti-Jackson newspapers, and he ardently favored Kentucky Senator Henry Clay's "American System," which called for internal improvements—meaning improvement of roads, canals, and rivers—a protective tariff, and a national bank. Lincoln surprised his audience with a plea for improving the Sangamon River for transportation.

Abraham Lincoln was now a man, both physiologically and legally, and ready to leave the family nest. How he would sup-

port himself was not clear. He was willing to try anything so long as it was not his father's occupations of farming and carpentry. So when Denton Offutt, a bustling, none too scrupulous businessman, asked him and John Hanks to take a flatboat loaded with provisions to New Orleans, Lincoln promptly accepted. When he went to Sangamo Town to help build the boat for Offutt, he left his father's house for good. He did not yet know who he was or where he was heading, but he was sure he did not want to be another Thomas Lincoln.

TWO

A Piece of Floating Driftwood

Abraham Lincoln arrived at New Salem, which was to be his home for the next six years, by accident. He was, he used to tell fellow residents, "a piece of floating driftwood," accidentally lodged by the floodwaters of the Sangamon River. He first saw the village in April 1831, when the flatboat that he, John Hanks, and John D. Johnston had constructed for Offutt became lodged on a milldam. Loaded with barrels of bacon, wheat, and corn, the flatboat was too heavy to float over the dam, and it began taking on water. The whole village watched as the crew struggled to save the boat and cargo. The young giant Lincoln attracted their special attention as, unable to budge the flatboat, he bore a hole in the bow and unloaded enough of the barrels in the rear so that the stern rose up. When the water poured out through the hole, the entire boat lifted and floated over the dam. Townsmen marveled at Lincoln's ingenuity, and Offutt, deeply impressed, vowed to set up a store in New Salem and make Lincoln the manager.

In late July, back from New Orleans, Lincoln returned to New Salem to find that Offutt had not lived up to his promise. There was as yet no store, though a stock of goods had been ordered. Lincoln took odd jobs to tide him over the summer.

New Salem was a place for which young Lincoln was perfectly suited. Founded only two years earlier on a high bluff above the Sangamon River, it was a commercial village that supplied the

needs of the surrounding rural areas. With about 100 residents it was the largest community Lincoln had ever lived in.

Quickly he established himself with the men of the town who gathered daily at the store run by Samuel Hill and John McNeil to exchange news and gossip. They welcomed Lincoln for his inexhaustible store of anecdotes. It was the rare man who could fail to be amused when this shambling youth with the mournful visage began to spin out one of his tales, told at great length with much mimicry. As he talked, one old-timer remembered, "his countenance would brighten up, the expression would light up, his eyes would sparkle, all terminating in an unrestrained laugh in which every one present willing or unwilling were compelled to take part."

In September, when Offutt's store finally opened, Lincoln had to gain acceptance from a different group. As a trading center New Salem attracted farmers and laborers from surrounding communities who came to have their corn ground, to buy supplies, or to have a few drinks. None of these visitors was wilder than the boys from Clary's Grove, a few miles to the west. Ignorant, careless of rules, these roughnecks were always ready for fun. Their devilments included cockfighting and gander pulling (a contest to see which rider could snap off the head of a live gander suspended from a tree). Above all, they valued physical strength.

When Offutt boasted that Lincoln was not merely the smartest man in New Salem but also the strongest, the Clary's Grove boys dared Lincoln to test his strength in a wrestling match with their leader and champion, Jack Armstrong. Lincoln was reluctant, but the taunts of his rivals obliged him to fight. Various versions of the contest survived: how Armstrong defeated Lincoln through a trick; how Lincoln threw Armstrong; how Armstrong's followers threatened collectively to lick the man who had defeated their champion until Lincoln volunteered to take them all on, but one at a time. The details were irrelevant. What mattered was that Lincoln proved he had immense strength and courage. Thereafter the Clary's Grove gang became his most enthusiastic admirers.

At the same time, the better-educated, more stable residents of New Salem came to think highly of this new arrival. Though the village was close to the frontier, a surprising number of inhabitants were people of some education. Dr. John Allen, for example, was a graduate of Dartmouth College. Those without formal education often had intellectual interests. Fat, lazy Jack Kelso had a remarkable mastery of the writing of Burns and Shakespeare. Though self-educated, Mentor Graham conducted the town's only school. All were struck by Lincoln's eagerness to learn. They were also impressed by his participation in the New Salem debating club.

Town worthies grew convinced that this was a young man with a future. They noted his painstaking attention to his duties at Offutt's store, and they took satisfaction in the interest he showed in town affairs. For instance, he regularly attended the sessions of the local court, over which the corpulent Bowling Green, the justice of the peace, presided. Always looking for amusement, Green initially allowed the young man to make comments on cases because he told anecdotes that, as one contemporary recalled, produced "a spasmotic [*sic*] shaking of the fat sides of the old law functionary." But soon he came to recognize that Lincoln also had a strong, logical mind. Presently neighbors began to rely on him for legal advice, and following a book of forms, he was able to draft simple legal documents.

In the spring of 1832 Green, James Rutledge, who was president of the debating club, and several other residents suggested that Lincoln run for the state legislature. Their choice was not as extraordinary as it might initially appear. The future of New Salem was linked to the Sangamon River. Down it went the area's surplus bacon, corn, and wheat, and up it, if the sluggish stream was improved, steamboats could bring salt, iron, and other commodities. New Salem needed a man in the legislature to represent its interests, and nobody could do that better than Lincoln, with his experience as a riverboat man.

At his friends' urging, Lincoln, in March 1832, announced himself a candidate. The move was another demonstration of the young man's belief that he was at least the equal, if not the

superior, of any man he ever met. To be sure, the post he was seeking was not an elevated one. State legislators dealt mostly with such issues as whether cattle had to be fenced in or could enjoy free range. Nor did candidates have to have the backing of a strong political party. Nevertheless, Lincoln's decision to announce himself a candidate for the state legislature in March 1832 was revealing. Less than a year earlier he had been, in his own words, a "friendless, uneducated, penniless boy, working on a flatboat." He was now settled in New Salem, but at the age of twenty-three he was only a clerk in a small country store, a young man with less than a year of formal education and with no experience in government. He was hardly known outside his little community. Yet he was ready to compete for votes in the entire county, contesting with men of far greater age and experience.

Other candidates had influential friends present their names to the electorate, but Lincoln, lacking such support, appealed directly to the public in Springfield's *Sangamo Journal*. "I was born and have ever remained in the most humble walks of life," he reminded voters, in what was to become part of his standard appeal. If elected, he would work hard for the people. But defeat would not be unbearable, because he was "too familiar with disappointments to be very much chagrined."

Lincoln's political career was interrupted by the collapse of Offutt's business ventures. Undercapitalized and overextended, Offutt's enterprises faltered in the spring of 1832 and then, as Lincoln said later, "petered out."

Left without a job, Lincoln was saved by the outbreak of the Black Hawk War. The Sauk and Fox Indians, who had been tricked into moving west of the Mississippi River, ceding their vast tribal lands in northwestern Illinois, repudiated their treaty with the federal government, and in May, one of their leaders, Black Hawk, returned to Illinois with about 450 warriors and 1,500 women and children to reclaim their homeland. When Governor John Reynolds called for volunteers to assist in repelling the invasion, men rushed to offer their services—some

out of patriotism, some out of animosity toward Indians, and some who knew that military service would aid their political careers. In Lincoln's case all these motives were at work, with the added inducement that the pay of a militiaman would be very welcome to a man with no other means of support.

On April 21 he and other volunteers from the New Salem neighborhood were sworn into service. As was customary, the men of the company elected their own officers. William Kirkpatrick, the owner of a sawmill, announced his candidacy, but some of the Clary's Grove boys proposed Lincoln. Both candidates stepped out in front, and the men formed a line behind their favorite. To Lincoln's delight two thirds of the group fell in line behind him. Many years later, after he had served four terms in the state legislature, had been elected to Congress, and had twice been nominated for the United States Senate, Lincoln said this election as militia captain was "a success which gave me more pleasure than any I have had since."

Lincoln tried to secure some discipline in his company. He learned a little about close-order drill, but not enough to master complicated commands. Once, finding his company marching into a fence, he could not remember how to order them to pass through the narrow gate. With considerable presence of mind he dismissed the company for two minutes, then ordered them to re-form on the other side.

Lincoln's service in the Black Hawk War was neither particularly dangerous nor heroic. Later, for political reasons, he used to poke fun at his military record. In 1848, when Democrats nominated Lewis Cass of Michigan for President, emphasizing his alleged military record in the War of 1812, Lincoln reminded listeners that he, too, was a military hero. "Yes sir," he declared; "in the days of the Black Hawk war, I had a good many bloody struggles with the musquetoes."

At the time, however, Lincoln was proud of his service, and he enjoyed the hearty comradeship of men-at-arms. When his first month's enlistment expired, he reenlisted. "I was out of work . . . and there being no danger of more fighting, I could

do nothing better than enlist again," he explained afterward. He served until July 10, when he was honorably discharged.

While he was in the army, Lincoln came into contact with a number of rising young political leaders of the state, like Orville Hickman Browning, a conservative Quincy lawyer, and John Todd Stuart, a Springfield lawyer. Handsome, polished, and well educated, Stuart was apparently the opposite of Lincoln, but he saw great promise in his New Salem friend.

Lincoln returned to New Salem in time for a brief campaign before the election for the state legislature on August 6, 1832. Like the other twelve candidates, he traveled about Sangamon County soliciting votes. He was an odd-looking figure, his swarthy complexion now deeply sunburned. On the campaign trail, as one observer remembered, "he wore a mixed jeans coat, clawhammer style, short in the sleeves . . . and a straw hat." In his speeches he discussed local issues for the most part, avoiding larger questions by announcing, "My politics are short and sweet, like the old woman's dance."

When the votes were counted, Lincoln ran eighth in a field of thirteen candidates, the top four of whom were elected. In his own New Salem precinct, however, he received 277 of 300 votes cast.

Consoling as that expression of neighborly support was, it did little to solve Lincoln's financial problems. Opportunity came when James and J. Rowan Herndon decided to sell their general store. William F. Berry, a corporal in Lincoln's company during the Black Hawk War, bought James Herndon's interest, and J. Rowan Herndon offered the other half interest to Lincoln. No money passed hands. "I believe he was thoroughly honest," Rowan Herndon explained, "and I accepted his note in payment of the whole."

Lincoln and Berry now owned one of the three stores in New Salem, competing with the well-managed establishment of Samuel Hill and John McNeil and a newer business owned by Reuben Radford. In January 1833 Radford offended the Clary's Grove boys, who retaliated by trashing his store. In despair he decided to sell. Canny young William Greene, Jr., bought the

store and damaged goods for $400 and immediately sold both to Lincoln and Berry, making a profit of $250. Once again the partners signed notes to cover most of their new purchase.

Moving their meager stock into Radford's building, Lincoln and Berry were ready for business. Like most country stores, they supplied customers with tea, coffee, salt, and a few other commodities that could not be produced in the village. In addition, the store carried blue calico, brown muslin, hats, and a small selection of shoes.

There was rarely enough business to keep the partners occupied, and Lincoln spent much of his time reading. Fiction did not interest him. Some poetry deeply moved him, and he memorized long passages from Shakespeare's plays. Jack Kelso probably introduced him to Robert Burns, many of whose long poems he was soon able to recite. When Dr. Jason Duncan showed him a poem called "Mortality" by a Scotsman, William Knox, he was moved by its mournful message:

> Oh! why should the spirit of mortal be proud?
> Like a swift-fleeting meteor, a fast-flying cloud,
> A flash of the lightning, a break of the wave,
> He passeth from life to his rest in the grave.

Lincoln memorized all fifty-six lines and recited them so often that people began to think he was the author. He also took pride in his mastery of Samuel Kirkham's *English Grammar.*

Though New Salem had no churches, it was an intensely religious community. There were no Catholic or Jewish residents, but Baptists, Methodists, and Presbyterians were constantly engaged in hairsplitting doctrinal controversies. Although these religious wars inevitably attracted Lincoln's attention, he was reluctant to accept any creed. To his analytical mind the ideas of the evangelists were less persuasive than those of the few local freethinkers who gathered about the store cracker barrel and engaged in speculation about the literal accuracy of the Bible, the virgin birth, the divinity of Christ, and the possibility of miracles. Discussion of such

issues was heresy in this orthodox frontier community, and reports of Lincoln's participation leaked out. So damaging was the allegation that he was "an open scoffer at Christianity" that in his race for Congress in 1846 he was obliged to issue a formal denial that he had ever spoken with disrespect of religion.

There was time for endless discussions in the Lincoln & Berry store because it was clear the enterprise was not going to succeed. It would be easy to blame the partners. Berry may well have been a heavy drinker, as tradition reports, and doubtless Lincoln was more interested in reading or in telling anecdotes than he was in selling his wares. But the basic reason for the failure was that by 1833 New Salem had ceased to grow, largely because the Sangamon River was not adequate to carry the village's surplus produce to market.

When the store "winked out," as Lincoln later said, he was out of a job. Once more he did day labor, like splitting rails, and he picked up a few dollars serving on juries, clerking at elections, and carrying poll sheets to Springfield. But it grew obvious that without regular employment he would have to leave New Salem. Fortunately, he had friends who wanted him to stay. Several of them rallied to procure for him the appointment as village postmaster. Lincoln was overjoyed.

The duties of his new job were not onerous. Carried on horseback, the mails were supposed to arrive twice a week. The recipient of a letter, rather than the sender, usually paid the postage, and it was the postmaster's job to collect the fee. The charge varied with the weight of the letter and the distance it traveled; for instance, it cost 6 cents to receive a letter consisting of a single sheet that had traveled thirty miles, and double that amount for a two-page letter. The postmaster received a percentage of all receipts, but in New Salem the amount was small. In 1834–35, the only year of Lincoln's three-year tenure for which records have been preserved, he received $55.70.

Though his appointment as postmaster gave Lincoln a position in the community, it did not provide a livelihood. One of his friends, learning that John Calhoun, the county surveyor,

was looking for an assistant, strongly recommended Lincoln. Knowing nothing of surveying, Lincoln secured copies of two textbooks on the subject, scraped together enough money to procure a compass and chain, and, as he said, "went at it."

Surveying was difficult work. Lincoln, accompanied by two chainmen, had to slog through swamps and cut through undergrowth to set markers and measure angles. At the end of a day's work he would often come in with clothes torn and legs scratched from briers.

As Lincoln gained experience, he undertook more complicated surveys. He was the principal surveyor in locating a road from the Sangamon River, through New Salem, and on toward Jacksonville. Bath, Petersburg, and Huron were among the towns he laid out.

When his surveying fees were added to his post office commission, he began to have enough to live on. Then the notes he had so freely signed to finance the Berry & Lincoln store began to come due.

This financial pressure gave special urgency to Lincoln's second race for the state legislature, in 1834. Party lines were by this time more sharply defined than during the 1832 elections. Democrats backed their hero, Andrew Jackson, in his decision to kill the Bank of the United States; their opponents, now known as Whigs, were loyal to Jackson's archenemy, Henry Clay. Lincoln, however, made no mention of his support for Clay's American System, which called for internal improvements. Instead, he conducted a handshaking campaign, stopping to talk with voters wherever his work as a surveyor brought him.

Behind Lincoln's silence on the issues lay political calculation. The village of New Salem was as strongly in favor of Whig policies as Lincoln himself; it needed the economic expansion the Whig Party promised. But the farmers in the countryside were Democrats, ardent supporters of President Jackson. Many of these, like the Clary's Grove boys, favored Lincoln on personal grounds, and according to Stephen T. Logan, his future law partner, "they told their democratic brethren in the other

parts of the county that they must help elect Lincoln, or else they wouldn't support the other democratic candidates." As a result, Lincoln received 1,376 votes—the second-highest number of any candidate—and he was one of the four candidates elected from Sangamon County. Another was his friend John Todd Stuart.

Elated, Lincoln prepared for his new job by studying law. Earlier he had thought about this possibility but had rejected it as being beyond his scope. Since then he had observed proceedings in the Sangamon County Circuit Court in Springfield. Learning that most of the leading lawyers were self-educated, he was doubtless led to believe this was a forum in which he could compete. After the election he often rode, or sometimes walked, into Springfield to borrow Stuart's lawbooks. On one of these trips he attended an auction, where he picked up a copy of Blackstone's *Commentaries*, and then, as he wrote later, he "went at it in earnest."

In other ways, too, Lincoln began readying himself for his first appearance at Vandalia, the state capital. Shortly after the election he borrowed enough money to purchase the first suit of clothes he ever owned. Lincoln was determined, as he said at the time, "to make a decent appearance in the legislature."

Lincoln's first session as an Illinois state legislator (December 1, 1834, to February 13, 1835) was not a memorable one. For the most part, he followed the lead of more experienced legislators like Stuart, with whom he roomed at one of the nearby boarding taverns. He found it easy enough to get around in Vandalia, which, though the state capital, was only a village of some 800 or 900 inhabitants. As the session wore on, his skill in drawing up legislation, hesitant at first, steadily improved. He participated in debates and apparently convulsed the house with brief remarks on the naming of a surveyor of Schuyler County. In the belief that the incumbent was dead, a new surveyor had been named, and he discovered that his predecessor was very much alive. (He "persisted not to die," as Lincoln expressed it.) Legislators were in a quandary until Lincoln urged them to do nothing. If in the future "the old surveyor should

hereafter conclude to die, there would be a new one ready made without troubling the legislature."

At the end of the session Lincoln drew his salary warrant for $158—he had already received $100 in December—and returned to New Salem with more money than he had ever had before. He needed it all. Just before he had left for Vandalia, the Sangamon County Circuit Court issued a judgment against him and Berry for overdue notes. When they were unable to pay, the sheriff attached their possessions, including Lincoln's horse and surveying compass. The action deprived him of his means of livelihood. Then, in January 1835, while Lincoln was still in Vandalia, Berry died, leaving practically no estate. Legally Lincoln was responsible for only half their debts, but he insisted he would pay them all when he was able. It would be several years before he could do so.

With little else to do during the spring and summer of 1835 except deliver the mail twice a week, he could study his lawbooks. As he read, much of the time he sat barefoot, propped up against a tree.

After a month or so, life began to get a little easier for him. In March, when the sheriff put up Lincoln's belongings for auction, his horse was for some reason exempt. Then one of Lincoln's admirers bid on the surveying equipment for $120 and immediately returned it to him. Soon he was back in the field making surveys.

Behind Lincoln's urgency to become a lawyer, there was now a new force: romance. From almost the day of his arrival in New Salem, the women of the village had matrimonial plans for him. They found his awkward clumsiness touching. With the wives of old friends, like Hannah Armstrong, who was married to Lincoln's New Salem friend Jack Armstrong, he could be courtly, even affectionate, but he froze in the presence of eligible girls.

Still, one young woman did interest him. She was Ann Rutledge, daughter of one of the founders of the village and the owner of the tavern where he sometimes roomed. She was very pretty, with fair skin, blue eyes, and auburn hair. Only five feet three, she was "heavy set," some said. But in Lincoln's eyes this was no disadvantage, for all the women he loved were plump.

How their friendship developed into a romance cannot be reconstructed from the record. No letter from Ann Rutledge is known to exist, and in the thousands of pages of Lincoln's correspondence there is not one mention of her name. But sometime in 1835 Lincoln and Ann came to an understanding. Lincoln doubted his ability to support a wife, and according to Ann's cousin James McCrady Rutledge, they agreed "to wait a year for their marriage after their engagement until Abraham Lincoln was Admitted to the bar."

That summer of 1835 was one of the hottest in Illinois's history, and it rained every day. When Lincoln was not slogging through water completing his surveys, he worked so unceasingly on his lawbooks that friends feared for his health. They had more reason to worry about Ann's, for in August she fell ill with "brain fever"—probably typhoid, caused by contaminated well water. Though her doctor prescribed absolute quiet, she insisted on seeing Lincoln. A few days afterward she became unconscious, and on August 25 she died.

Lincoln was devastated. This terrible blow must have brought to mind memories of earlier losses: his infant brother Thomas, his sister Sarah, and, above all, his mother. His nerves, already frayed by overwork, began to give way. So distraught was he that friends persuaded him to visit his old friend Bowling Green, who lived about a mile south of New Salem. There he found rest and comfort.

By September 24 he was back making surveys, but the memory of Ann Rutledge did not quickly fade. Many years later, after his first election as President, he talked with an old friend, Isaac Cogdal, about his early days in New Salem. When the name Rutledge came up, Cogdal asked whether it was true that Lincoln had fallen in love with Ann. "It is true—true indeed I did," Lincoln replied. "I did honestly and truly love the girl and think often—often of her now."

The special session of the legislature, called for the winter of 1835–36, did much to shape his future course. For the first time national politics intruded into the proceedings of the legislature.

A presidential election was approaching, and Democrats, aware of hostility toward Andrew Jackson's choice of a successor, Martin Van Buren, sought to unite the party by convening a statewide political convention in Vandalia. In addition to endorsing Van Buren, the convention condemned all who were "striving by means of false representations, to create divisions and dissentions [*sic*] among the Democratic party." The action infuriated the Whigs, the minority party, who had hitherto been successful in statewide elections only by encouraging factionalism among Democrats. Angrily Whig legislators, including Lincoln, condemned the convention system as a device of political manipulators to kill off candidates opposed to them. It took some years for the Whigs to learn that they, too, could benefit from this same system.

More immediately important was the reapportionment legislation of this session. The population of Illinois had been growing rapidly, mainly in the northern and central parts of the state, and the southern counties, which had been settled first, were heavily overrepresented. Lincoln was in favor of a moderate reallocation of seats and, consequently, opposed the more drastic measure approved by the legislature, which gave Sangamon County the largest delegation in the house of representatives—seven, rather than four, members.

One of the main purposes for which Governor Joseph Duncan had called the special session was to enact legislation to support the building of a canal that, by connecting the Illinois and Chicago rivers, would link Lake Michigan to the Mississippi River. The legislature obliged by authorizing a loan of $500,000 to support the bonds of the Illinois and Michigan Canal. On a crucial vote (28 to 27) Lincoln supported the measure.

The impact this legislation had on Lincoln's course would not be evident until the 1836 session of the legislature, and before that, he had to run for reelection. The campaign was a strenuous one. Lincoln, along with sixteen other candidates, traveled by horseback from one village to another. Speaking began in the morning and often continued until well into the afternoon. At times tempers flared. Ninian W. Edwards, the wealthy son of

a former governor, was so offended by the remarks of one of his competitors that he drew a pistol on him. Even Lincoln, usually genial, lashed back angrily at one critic, branding the man "a liar and a scoundrel." But Lincoln continued to have the strong support of his neighbors, and in the election on August 1 he received more votes than any other candidate.

The Sangamon delegation to the 1836–37 session of the legislature became known as the Long Nine, because the two senators and seven representatives were all unusually tall. But they were distinguished even more by their enthusiastic support of two objectives: promotion of the Sangamon County city of Springfield to replace Vandalia as the state capital, and state support for internal improvements. The delegation looked to Lincoln, now an experienced legislator, as their floor leader.

In the house of representatives the initiative to promote internal improvements was taken by Stephen A. Douglas, the newly elected member from Morgan County, who instantly assumed leadership of the Democrats. Only five feet four but with a massive head and a deep baritone voice, Douglas, at the age of twenty-three, had already mastered the arts of legislative politics and was eager to hasten the state's economic development. Promptly he introduced a plan for the construction of a railroad to be underwritten by the state.

Whigs, including Lincoln, welcomed Douglas's initiative, and the legislature provided for state loans to construct a central railroad, build roads, and improve rivers. Nearly everyone agreed with the Alton *Telegraph* that the new legislation would be "the means of advancing the prosperity and future greatness of our state."

The panic of 1837 put an end to these high hopes and effectively killed the internal improvements plan. The state's finances suffered, and Illinois bonds fell to 15 cents on the dollar. Very little construction was ever completed, and the state was littered with unfinished roads and partially dug canals.

Members of the Long Nine were more successful in their goal to relocate the state capital to Springfield. Vandalia, most people felt, was too small and too far south. But Springfield had ri-

vals. Those opposed to Springfield tried to whittle down the influence of the Sangamon delegation. They failed, in part because of Lincoln's political skills. On one occasion, in order to eliminate the smaller and poorer towns from the competition, he drafted an amendment requiring that the city selected must donate $50,000 and two acres of land for new state buildings; then, to keep it from being known that this was a move in the interest of Springfield, which could afford such a gift, he allowed the amendment to be introduced by a member from Coles County.

In the end, the work of the Long Nine paid off. On February 28 Springfield received a clear majority of votes.

That night the victorious Sangamon delegation celebrated at Capp's Tavern, to which all members of the legislature were invited. Cigars and oysters disappeared rapidly, as did eighty-one bottles of Champagne, for which the wealthy Ninian Edwards paid $223.50. Afterward there were celebrations in Springfield and other parts of Sangamon County, which the Long Nine attended. At the Athens rally the toast was "Abraham Lincoln one of Natures Noblemen."

When the legislature adjourned, Lincoln returned to New Salem to say good-bye to his friends. In September two justices of the Illinois Supreme Court had licensed him to practice law, and on March 1 his name was entered on the roll of attorneys in the office of the clerk of the supreme court. That April he removed to Springfield, where John Todd Stuart took him into partnership.

THREE

Cold, Calculating, Unimpassioned Reason

On April 15, 1837, Lincoln rode into Springfield on a borrowed horse, with all his worldly possessions crammed into the two saddlebags. At the general store of A. Y. Ellis & Company he inquired how much a mattress for a single bed, plus sheets and a pillow, would cost. Joshua F. Speed, one of the proprietors, reckoned up the figures and announced a total of $17. Lincoln replied that that was doubtless fair enough, but he did not have so much money. Telling Speed he had come to Springfield to try an "experiment as a lawyer," he asked for credit until Christmas, adding in a sad voice, "If I fail in this, I do not know that I can ever pay you."

Speed, who knew this young man by reputation and had heard him make a political speech, suggested a way he could avoid the debt. "I have a large room with a double bed up-stairs, which you are very welcome to share with me," he offered.

"Where is your room?" asked Lincoln. When Speed pointed to the winding stairs that led to the second floor, Lincoln picked up his saddlebags and went up. Shortly afterward he returned beaming and announced, "Well, Speed, I am moved!"

Such a quick alternation from deep despair to blithe confidence was characteristic of Lincoln's early years in the new state capital. He was trying to put together the fragmented pieces of his personality. Sometimes he felt he was the prisoner of his

passions, but at other times he thought he could master his world through reason.

Springfield in the 1830s was a frontier town. Though there were a few brick edifices, many of the residences were still log houses. If the roads were wide, they were unpaved; in winter, wagons struggled through axle-deep mud, and in summer, the dust was suffocating. The town had no sidewalks, hogs roamed the streets, and there was a stench from manure piled outside the stables. But this community of 1,500 was the most sophisticated place Lincoln had ever lived.

He found easy acceptance in Springfield because he arrived not as an unknown but as the partner of Stuart, one of the most successful lawyers in town. Stuart, who was concentrating on winning a seat in the United States House of Representatives, turned over most of the business to his junior partner. Their office was a single room on the second floor in a row of brick buildings on Fifth Street known as Hoffman's Row.

But a full schedule did not mean full pockets. Springfield was a town full of lawyers, and all were obliged to charge modest fees. For most of the cases Stuart & Lincoln handled, the fee was $5. In one case the partners charged $50, a fee so high that the client apparently asked to pay some of it by making a coat for Stuart, worth $15. It was Lincoln's job, as junior partner, to record these fees, which he and Stuart split equally.

From the beginning Joshua Speed was Lincoln's close companion, and he became perhaps the only intimate friend Lincoln ever had. Four years younger than Lincoln, Speed was also a Kentuckian. Unlike Lincoln, though, Speed came from a prominent family that owned a prosperous plantation called Farmington, near Louisville. With flashing blue eyes and a mane of dark, curly hair, his vaguely Byronic air of elegance made him especially attractive to ladies.

For nearly four years Lincoln and Speed shared a double bed, and their private thoughts, in the room above Speed's store. No one thought there was anything unusual about the arrangement. It was rare for a single man to have a private room, and

it was customary for two or more to sleep in the same bed. Much of the time when Lincoln and Speed were sharing a bed, young William H. Herndon, who was clerking in Speed's store, slept in the same room, as did Charles R. Hurst, a clerk in another dry-goods store.

Around Lincoln and Speed gathered other young unmarried men of Springfield, like James H. Matheny, who would be the best man at Lincoln's wedding, and James C. Conkling, a Princeton graduate who began practicing law in Springfield in 1838. Before the great fireplace in the back room of Speed's store, they met night after night, and, as Herndon recalled, they staged debates on politics, religion, and all other subjects.

Like many of his contemporaries, Lincoln was troubled by what he perceived as the rapid rate of change in American life. Canals and railroads were bringing about a transportation revolution; the population was spreading across the continent; immigration was beginning to seem a threat to American social cohesion; sectionalism was becoming ever more divisive as the controversy over slavery mounted. Most disturbing were recent outbreaks of mob violence in Mississippi and St. Louis.

Lincoln addressed some of these issues when he spoke to the Young Men's Lyceum in January 1838. In a speech entitled "The Perpetuation of Our Political Institutions" he attacked hyperemotionalism in politics, warning that the nation's "proud fabric of freedom" was endangered by the passions of the people—"the jealousy, envy, and avarice, incident to our nature." As a remedy to lawlessness he urged what he called a simple solution: "Let every American, every lover of liberty, every well wisher to his posterity, swear by the blood of the Revolution, never to violate in the least particular, the laws of the country; and never to tolerate their violation by others."

This was standard Whig rhetoric, but at this point in the lyceum lecture, when most listeners must have thought he had nearly finished, Lincoln, in effect, began again, asking why the danger to American political institutions was so much greater now than it had been for the past fifty years. In previous generations, he suggested, when the outcome of the American ven-

ture in self-government was still in doubt, "all that sought celebrity and fame expected to find them in the success of that experiment." Even now there were "many good men" who aspired "to nothing beyond a seat in Congress, a gubernatorial or a presidential chair." But, he added, in a rare moment of self-revelation, "such belong not to the family of the lion, or the tribe of the eagle." Such honors were not enough for "men of ambition and talents." These routine offices would not satisfy "an Alexander, a Caesar, or a Napoleon," from whom the greatest danger to popular government must be expected. "Towering genius disdains a beaten path," Lincoln reminded his audience. "It thirsts and burns for distinction."

Few of Lincoln's listeners could have realized that he was unconsciously describing himself. His ambition was no secret. As Herndon said, it was "a little engine that knew no rest." But only Speed understood how avid was his thirst for distinction. To this one intimate friend Lincoln confessed his ambition "to link his name with something that would redound to the interest of his fellow man," and in his darker moods he lamented "that he had done nothing to make any human being remember that he had lived."

It was to guard against "men of ambition and talents"—like himself—that Lincoln urged a second, and fundamentally different, way to preserve American political institutions. He proposed erecting a "temple of liberty," carved "from the solid quarry of sober reason."

That invocation of reason accounted for Lincoln's reservations about abolitionism and other humanitarian reform movements. For instance, he never joined the prohibition movement, even though he himself did not use liquor. He disliked the emotionalism of the prohibitionists, preferring "kind, unassuming persuasion." Passion, he remarked in the conclusion of his lyceum lecture, "will in future be our enemy." In its stead the nation must rely on "reason, cold, calculating, unimpassioned reason."

The earnestness of Lincoln's efforts to impose rationality on public life reflected his internal struggle to bring coherence to

his own, still unshaped personality. He was not yet sure who he was or how he wished to be perceived. He liked to associate with the aristocratic element of Springfield, to which he was introduced by Stuart. But he also wanted, as he said, to be "one of the boys."

Similarly conflicted were his attitudes toward women. Lincoln liked women, but he did not know how to behave around them.

He met young women primarily at the Sunday soirees that Ninian and Elizabeth Edwards held at their luxurious mansion. Around them gathered the brightest and best of Springfield society. The handsome John J. Hardin, a relative of Mrs. Edwards's and a likely candidate for Congress, attended most of their soirees. So did Edward D. Baker, the popular young Whig orator. O. H. Browning represented the conservative element of the Whig Party. The Edwardses also welcomed Stephen A. Douglas, now the leading Democrat in the state, already known as the Little Giant because his power belied his size. Democrat James Shields, the handsome Irish-born state auditor, was often a guest.

The Edwardses' entourage included the most attractive young women in Springfield, none of whom attracted more interest than Mrs. Edwards's younger sister, Mary Todd. The daughter of Robert S. Todd, a prosperous merchant and banker of Lexington, Kentucky, Mary had grown up in luxury, attended by slaves and educated in the best private schools. Unable to get along with her stepmother, she decided to pay her sister an extended visit in 1839. Immediately this pretty young woman of twenty-two years, with beautiful fair skin, light chestnut hair, and remarkably vivid blue eyes, enchanted the others in the group, including Abraham Lincoln, who soon became one of her regular attendants.

Vivacious and intelligent, Mary was entirely different from anyone Lincoln had ever known. He did not even feel awkward when talking to her, for she made up for his deficiencies as a conversationalist. Mrs. Edwards recalled that when they were together "Mary led the conversation—Lincoln would listen and gaze on her as if drawn by some superior power."

In receiving Lincoln's attentions, Mary had to think of him as a potential husband. Marriage was very much on her mind. She was just short of becoming an old maid, and except for schoolteaching, no other career was open to women of her class. There were not many eligible bachelors. She liked Douglas, with whom she flirted outrageously, but both recognized that his mind was on his career and he was not seriously interested in matrimony. The widower Edwin B. Webb, another Springfield attorney, was an earnest suitor, but he suffered from the disadvantages of being considerably older than Mary and of having what she called "two sweet little objections"—the children of his first marriage.

By comparison, Lincoln looked increasingly attractive. He lacked social graces, but his honesty and considerateness compensated for the deficiency. They shared many interests. Both were Kentuckians. Both loved poetry and had memorized many of the same poems. At a time when women were not supposed to profess an interest in politics, she was, like him, an ardent Whig. She was pleased by Lincoln's ambition; in Kentucky she had often said jokingly that she intended to marry a man who would someday become President. By the fall of 1840 she and Lincoln were edging toward a closer relationship, and sometime around Christmas they became engaged.

Once Lincoln had made a commitment, he began to have second thoughts. It was as if he were reluctant to marry anyone willing to accept him. Belatedly he worried about his ability to support a wife. His law partnership was about to be dissolved. During the past two years Stuart had contributed little to the practice, having been in Washington for most of that time. Now that he had been reelected to a second term in the House of Representatives, it made no sense to continue his empty partnership with Lincoln. Lincoln was not even assured of his income from the state legislature. With the collapse of the internal improvements system, he and his associates had come under bitter and sometimes personal attack, and he resolved not to stand for reelection when his present term expired. Thus in 1840 he was a man

without reliable income. He knew he could not give Mary the life of luxury to which she was accustomed.

These anxieties covered his deeper uncertainties about marriage. Like Speed, he was probably still sexually inexperienced. Both young men had grown up in a rough frontier society where men and women kept largely to themselves and where, in all-male gatherings, there was much talk about sex—and usually much less experience. Both shared "forebodings" about marriage. Probably they were anxious about their own sexual adequacy. Both Lincoln and Speed rationalized their fears as apprehension that they did not love their fiancées as they should. The man who wanted to live in a universe governed by cold reason found himself awash in a sea of turbulent emotions.

His nerve snapped, and he decided to break the engagement. When he went to Mary and told her he did not love her, she burst into tears.

After Lincoln left, Mary brooded over "the reason of his change of mind—heart and soul" and concluded, without any real justification, that he was in love with her cousin Matilda Edwards. She wrote Lincoln a letter releasing him from his engagement, yet letting him know "that she would hold the question an open one—that is that she had not changed her mind, but felt as always."

Instead of feeling relieved, Lincoln was devastated. Mary's letter made him realize what he had lost. He became deeply depressed. During the first week in January he was able to go about his business in a perfunctory way, but then the burden of guilt and unhappiness became too great and he took to his bed for about a week, unwilling to see anybody except Speed and his good friend Dr. Anson G. Henry. His mind was in turmoil as he reflected on how he had acted. Bitterly he reproached himself for inconstancy. "My own ability to keep my resolves when they are made," he told Speed, was once the source of pride "as the chief gem of my character." Now that was lost. He was haunted by "the never-absent idea" that he had made Mary unhappy. "That still kills my soul," he wrote his best friend.

Lincoln's collapse became the subject of public gossip. Most of Springfield concluded that Lincoln was grieving because Mary Todd had broken their engagement.

During the following months Lincoln tried to bring his life back under control. Dropping out of the Edwardses' social circle, he no longer saw much of his friends. In April he took a major step toward solving his financial uncertainties by entering into partnership with Stephen T. Logan. From the outset Logan & Lincoln had many clients, but Lincoln, who probably received a third rather than one half of the fees, did not make a great deal of money.

He was still unhappy and far from well. In August he decided to visit Joshua Speed, who had returned to Kentucky, and for nearly a month he stayed at the Speed home near Louisville, where he experienced a life of leisure he had never known before. One of the house slaves was even assigned to be his personal servant. Lincoln took long walks with Joshua, made friends with Mary, Joshua's half sister, and on trips into Louisville met Joshua's brother, James Speed, who lent him books from his law library. The devout Mrs. Speed had long motherly talks with him and presented him with a Bible, urging him "to read it—to adopt its precepts."

In Kentucky, Lincoln came to realize that Joshua was facing a psychological crisis much like his own. He was engaged to Fanny Henning, a vivacious girl with what Lincoln called "heavenly black eyes." But as the time for marriage neared, Speed began to have second thoughts. Back in Springfield, Lincoln sent a stream of letters designed to keep his friend's spirits up and to encourage him to marry.

In effect, Lincoln was also encouraging himself, for he was once more approaching marriage with Mary Todd. After their rupture the two had tried to avoid each other, but then Mrs. Simeon Francis, wife of the editor of the Whig newspaper, the *Sangamo Journal,* intervened. Inviting both Lincoln and Mary to a social affair, she brought them face to face and enjoined, "Be friends again."

Presently the pair began meeting at the Francis house, keeping the secret from everyone except Dr. Henry, who was monitoring Lincoln's health, and Julia Jayne, Mary's most intimate friend. They took special care not to let the Edwardses know, because after the engagement was broken, they had bluntly told Mary that she and Lincoln "had better not ever marry—that their natures, mind—education—raising etc. were so different they could not live happily as husband and wife."

In these meetings the couple's growing intimacy was given a special boost by a political contretemps. In February 1842 the State Bank of Illinois, which Lincoln had often defended in the state legislature, had been forced to close, and its notes became worthless. As commerce virtually ceased throughout Illinois, state auditor James Shields directed that the bank's notes not be accepted in payment of taxes. Immediately Whigs tried to take advantage of the crisis to attack the Democratic administration and especially Shields, who, next to Douglas, was the most prominent young Democrat in Illinois.

No one took a more active part in this assault than Lincoln. Writing to the *Sangamo Journal,* he picked up the pseudonym of someone who had written amusing letters to the editor from "Lost Townships." Using the persona of "Rebecca," an uneducated but shrewd countrywoman, he attacked Democratic policies and made fun of Shields. Allowing his sense of humor free rein, Lincoln had "Aunt Becca" report her neighbor's description of Shields at a fair attended by all the eligible young women of Springfield: "He was paying his money to this one and that one, and tother one . . . ; and the sweet distress he seemed to be in,—his very features, in the exstatic agony of his soul, spoke distinctly—'Dear girls, *it is distressing,* but I cannot marry you all. Too well I know how much you suffer; but do, *do,* remember, it is not my fault that I am so handsome and *so* interesting.'"

Obviously Lincoln had fun writing his Lost Townships letter, and when he proudly showed it to Mary Todd and Julia Jayne, they helped him sharpen its barbs before it appeared in the *Sangamo Journal* on September 2. Carried away by the excite-

ment, the two young women wrote their own letter, a rather clumsy effort that capitalized on the rumor that Shields was going to demand satisfaction for the insults he had received.

In selecting Shields as the object of their ridicule, the three were playing a dangerous game. They had attacked the state auditor at his most vulnerable points, for, though a man of excellent character, he had affected manners and fancied himself irresistible to women. Moreover, he had no sense of humor. Hot-tempered, Shields demanded that Simeon Francis, the editor of the *Journal,* reveal the name of his anonymous assailant. To protect the women, Lincoln authorized Francis to say he was responsible for all the Lost Townships letters. Shields promptly wrote Lincoln requiring a retraction. The consequences of a refusal did not need spelling out. Shields was a military man, familiar with the protocol of the code duello.

Lincoln was opposed to dueling. But he made the mistake of consulting a hot-blooded young Springfield physician, Dr. Elias H. Merryman, who clearly wanted a duel to take place. Under Merryman's coaching he refused to apologize.

After that, Shields's friend John D. Whiteside brought Shields's challenge to a duel, and Lincoln named Merryman his second. As the party challenged, Lincoln had the right to name the weapons, and he chose broadswords. He realized that with his height and long arms, broadswords would give him a considerable advantage over Shields, who was only five feet nine inches tall.

Because dueling was outlawed in Illinois, the parties agreed on a spot in Missouri, across the Mississippi River. As the encounter was about to begin, John J. Hardin, Lincoln's political associate and a relative of Mary Todd's, and Dr. R. W. English intervened to stop the fight. As friends of both parties, they persuaded Shields to withdraw his insulting note so that Lincoln could disavow any intention of injuring the auditor's "personal or private character or standing as a man or a gentleman" and claim that he wrote the Lost Townships correspondence "solely for political effect."

With that, the parties shook hands and returned to Illinois. Lincoln was ashamed of the episode. He was humiliated that he had acted foolishly, and he was embarrassed that, as a lawyer and an officer of the court, he had violated the law. But what really hurt was the realization that he had allowed himself to be ruled by his emotions. With anguish he remembered how he had urged his fellow citizens to be guided by "reason, cold, calculating, unimpassioned reason."

But the Shields affair had the unanticipated benefits of renewing his engagement to Mary Todd, who was touched by his chivalry in covering her contributions of the Lost Townships letters. Encouraged by Speed's assurances that he was happy with his new bride, Fanny, Lincoln renewed his offer of marriage. Mary accepted. They informed the Edwardses at the last possible moment, so that Elizabeth, who delighted in giving grand parties, had only a few hours to prepare for the wedding on November 4, 1842.

As Lincoln prepared for the ceremony, he, like many another bridegroom, began to get cold feet. While he was blacking his boots, Speed Butler, the son of his landlord, asked where he was going, and Lincoln replied, "To hell, I suppose."

Despite the haste and the forebodings, the wedding ceremony went off without incident, and Lincoln placed on his wife's finger a ring engraved "Love is eternal."

FOUR

Always a Whig

"Nothing new here," Lincoln wrote a friend on November 11, 1842, "except my marrying, which to me, is a matter of profound wonder."

The newlyweds took up residence in the Globe Tavern, a two-story wooden structure on the north side of Adams Street, where, for $4 a week, they occupied an eight- by fourteen-foot room on the second floor and took their meals in the common dining room.

For Mary the hotel was a comedown after her father's spacious house in Lexington; for the first time she had no personal servants, no place to display her possessions, no private room where she could receive callers. But she voiced no dissatisfaction. Nor did she complain when her sisters, who had warned her against an unsuitable marriage, largely dropped her from their social circle. She was so in love with her husband that she was willing to live a very quiet life.

Pregnancy helped account for the remarkable transformation. On August 1, 1843, the Lincolns' first child was born. They named him Robert Todd, after Mary's father. In this trying period Lincoln did his best to be supportive, and after Robert's birth Mary awoke to see her "darling husband, . . . bending over me, with such love and tenderness." But such displays of affection were rare. As Mary said years later, Lincoln "was *not* a demonstrative man, when he felt most deeply, he expressed the

least." Their relationship was never an equal one. She always addressed him, in formal Victorian style, as Mr. Lincoln. In letters he referred to her as Mary. After Robert's birth he always addressed her as Mother.

Realizing they could not raise a family in a hotel room, the Lincolns began looking for a house of their own, but money was scarce. Lincoln no longer had his salary from the legislature. Joining with Logan opened the prospect of a brighter future, but it offered no immediate increase in Lincoln's income. The best he and Mary could do was to rent a small three-room frame house. There Robert S. Todd, Mary's father, found them shortly before Christmas 1843, when he came to visit his four daughters who lived in Springfield and to inspect his newest grandchild and namesake.

Todd took a great liking to his son-in-law. Touched by the meagerness of Mary's surroundings, he dropped a gold piece into her hand. Afterward he arranged for her to receive $120 a year for the rest of his lifetime, which would more than cover the cost of hiring a maid at $1.50 a week. Todd also deeded to the Lincolns—as he did to each of his Springfield daughters and their husbands—80 acres of Illinois land.

By 1844 the Lincolns felt able to buy a home of their own, and they purchased a cottage on the corner of Eighth and Jackson streets. It was small, to be sure. On the ground floor there were three rooms—a parlor, a sitting room, and a kitchen; in the half loft above, under the low, sloping ceiling, there were two bedrooms. The downstairs rooms were heated by fireplaces, and there were wood-burning stoves upstairs. Water came from a cistern and a well in the backyard. A latrine near the back fence offered the only sanitary facilities. Despite its limitations, the Lincolns thought it worth every penny of what it cost—$1,200, plus a town lot on Adams Street, which Lincoln owned, valued at $300.

With great energy Lincoln now set about earning money. Most of his income came from drafting wills and petitions, from petty suits before the justices of the peace, and especially from actions before the Sangamon County Circuit Court. On a single

day of that court in November 1842, Logan & Lincoln had seventeen cases. Business was so good that the partners could afford to move to the premier business location in Springfield, the newly constructed Tinsley Building, on the southwest corner of Sixth and Adams streets. Their office was on the third floor, in a front room overlooking both the state capitol and the county courthouse.

Lincoln learned much from Stephen Logan, who was nine years older and unquestionably the leading figure in the Sangamon County bar. Mostly, though, Lincoln learned by reading. He spent night after night in the Illinois Supreme Court Library searching out precedents that applied to cases he was working on. This was work he enjoyed. "When I have a particular case in hand," he explained, "I love to dig up the questions by the roots and hold it up and dry it before the fires of the mind." His care and thoroughness made him one of the most successful practitioners before the court.

In the fall of 1844 Logan and Lincoln decided to dissolve their highly successful partnership. The senior partner told Lincoln he wanted to go into business with his son, and Lincoln did not argue. Instead, he took a new partner, William H. Herndon, who had shared his room above Joshua Speed's store and had been studying law with Logan and Lincoln. Many found the new partnership puzzling. Now a prominent lawyer, Lincoln could have had his pick of distinguished Illinois attorneys. He left no record of his reasons, but it is clear that he was tired of being a junior partner and wanted to head his own firm. He had watched Herndon read law for two or three years and found him "a laborious, studious young man . . . far better informed on almost all subjects than I have been."

There were also political reasons behind his choice. Lincoln aspired to go to Congress, but the Whig Party in central Illinois was split into two factions. In the past, leadership had come from the eminently respectable Stuarts and Edwardses. Now the majority of Whig voters were self-made men who scorned the older leadership and wanted a hand in shaping party policy.

Lincoln needed the support of both factions. Marriage to the elegant Mary Todd gave him a connection to the silk-stocking element. Recognizing that Herndon was a leader of the populist element, Lincoln chose him as partner in part to give a signal to the young Whigs that he had not deserted them.

More important than any of these calculations was an essential fact: Lincoln really liked Herndon, who bubbled over with ideas and enthusiasm. Herndon, in turn, gave Lincoln unquestioning loyalty.

The two men were almost exact opposites. Lincoln was tall, slow-moving, and careless in dress; Herndon, nine years his junior, was short, quick, and something of a dandy. Lincoln was melancholy, his depressed moods interrupted by outbursts of antic humor; Herndon was always upbeat and had no sense of humor. The senior partner's mind moved in logical progression from one fact to the next, while his junior leaped ahead, using intuition to arrive at his conclusions.

At the outset it was not an equal partnership. Lincoln interviewed most of the clients, wrote the important legal papers, and pleaded the suits in court. Herndon, still the student, performed routine jobs; he answered inquiries as to Lincoln's whereabouts or "toated books and hunted up authorities" for the senior partner's use. It was also his responsibility to manage the office and keep the files straight. As Lincoln later told Henry C. Whitney, a fellow lawyer in Urbana, he supposed that Herndon "had system and would keep things in order."

His hope was misplaced, for Herndon was not an orderly person. It is doubtful, though, that anyone could have kept Lincoln's papers in order. The firm had no filing cabinets and no files. In one corner of the office was a bundle of papers with a note in Lincoln's handwriting: "When you can't find it anywhere else, look in this." Herndon sometimes took papers home, where they were lost. Lincoln frequently stuck documents in his stovepipe hat, which Herndon said was "his desk and his memorandum-book." There were times when the partners had to confess frankly that papers sent them could not be found.

* * *

No amount of industry could earn a lawyer a satisfactory income from practice in Sangamon County alone. Most Springfield attorneys who were not independently wealthy traveled with the judge of the circuit court when, twice every year, in the spring and the fall, he made his pilgrimage from one county seat to another in his district. The vast Eighth Circuit stretched across two thirds of the width of the state and one third of its length. The judge and more affluent lawyers traveled in buggies, but in the early days Lincoln rode his rather decrepit horse, Old Tom, carrying in his saddlebags a change of underclothing, his legal papers, and perhaps a book or two. The caravan could usually travel only about four miles an hour because the roads were atrocious. Many streams had no bridges, and the judge often asked Lincoln, who had the longest legs, to explore for a ford; if Lincoln could get over, the others would follow. At night they stopped wherever they could find lodgings. Sometimes, Herndon remembered, they slept "with 20 men in the same room." After a breakfast of greasy food and what one lawyer called "pretty tough coffee," the caravan moved on toward the next county seat.

It took at least ten weeks to complete the circuit—and then the whole process had to be repeated in the fall. Consequently, Lincoln spent about three months of every year traveling. Many attorneys returned home over the weekends, but Lincoln generally remained with the court. In the early years of his marriage, friends reported that he was "desperately homesick," but it made no sense for him to keep rushing home; he was on the circuit to earn money, and the longer he stayed in the small county towns, the better acquainted he became with the local lawyers who could throw cases his way. Staying in these small towns also gave him a political advantage, winning him supporters for future political contests. He "knew, or appeared to know every body we met," wrote one reporter who in 1847 made a stagecoach trip through central Illinois with Lincoln.

In addition, Lincoln enjoyed the circuit life. What others considered hardships were matters of indifference to him. He did not

care where he slept, and he ate whatever food was put in front of him. The circuit's hearty masculine atmosphere also gave him relief from a domesticity he sometimes found smothering.

The Lincolns' domestic life was often troubled. Husband and wife were as different in temperament as they were in physique. He was slow, moody, given to bouts of melancholy and long periods of silence. She was lively, sociable, constantly needing attention and admiration.

A shortage of money contributed to their problems. Overcrowded when they moved in, their tiny house became more so after 1846 with the birth of their second son, Edward—named after Lincoln's friendly political rival Edward D. Baker. A minor remodeling to create a downstairs bedroom did not do much to ease the situation.

Lincoln, immersed in his own work, probably had no idea how hard his wife had to labor. She had to cook and clean, pump the water in the backyard and haul it into the house, and keep the wood fires going. Though Lincoln had his suits made by the local tailor, she had to sew all her own clothes, as well as those of her children. Above all, she had to pay close attention to her babies, especially to little Eddie, a sickly child. Despite the money her father gave her, she only occasionally had assistance, most often from Irish-born maids—the "wild Irish," as she called them. But she thought they were lazy, and she quarreled with them all.

Mary Lincoln's bad temper was famous in Springfield. Everybody heard stories about the tongue-lashings she gave to maids, to workmen about the house, to street vendors—and to her husband. In part, these were the result of overwork. In part, they reflected the unsteady condition of her health. Every spring she was afflicted with excruciating headaches—possibly the result of an allergy. Highly emotional, she was terrified of lightning storms, of dogs, of robbers; and when she was in a panic, she could not control her actions.

In considerable measure Mary Lincoln's outbursts were reactions to her husband's behavior: He was a very difficult man to

live with. For three months out of every year he was off riding the circuit. Even when he was home, he did not provide the comfort or affection she craved. After a busy day at work he wanted to sit quietly before the fire, reading. Sometimes his inattention made her fly off the handle. On one occasion, as he sat reading in his rocking chair while she cooked dinner, she warned him that the fire was about to go out. Absorbed in his reading, he did not respond, and she called out again and then a third time. Furious at being ignored, she struck him on the nose with a piece of firewood.

But for all their quarrels, the Lincolns were devoted to each other. In the long years of their marriage Abraham Lincoln was never suspected of being unfaithful to his wife. She, in turn, was immensely proud of him. When someone compared her husband unfavorably to Douglas, she responded stoutly, "Mr. Lincoln may not be as handsome a figure . . . but the people are perhaps not aware that his heart is as large as his arms are long."

Their children further cemented their marriage. Both the Lincolns had to learn that parenting is a difficult art, and inevitably they made mistakes, especially with their first son. High-strung and overprotective, Mary constantly worried over Bob, and when the little boy disappeared from her sight for a few minutes, she was likely to alert the whole neighborhood that he was lost. Lincoln, for his part, gave too little attention to his older son. Occasionally he took the boy for walks, and when he was chopping firewood in the backyard, he let his son help by splitting kindling. But Robert's principal memory of his father during these years was of his loading his saddlebags in preparation for going out on the circuit.

Politics was another bond that held the marriage together. Both Lincolns admired Henry Clay, the founder of the Whig Party—Mary, because he was a friend of the Todd family's in Lexington; her husband, because Clay was his "beau ideal of a statesman."

From the beginning of Lincoln's political career he supported the Whig Party and was a strong defender of its economic poli-

cies. But membership in the Whig Party meant something more than issues to Lincoln. He thought the party embodied the promise of American life. It stood for growth, for progress. Clay's American System sought to link the manufacturing of the Northeast with the grain production of the West and the cotton and tobacco crops of the South. When economic interests worked together, so would political interests, and sectional rivalries would be forgotten in a powerful American nationalism. This was a vision that attracted many of the wealthiest and best-educated members of society to the Whig Party, but it was also one that appealed to young men who aspired to get ahead. Clay, who coined the term "self-made man" to describe Kentucky businessmen, might accurately have applied it to Lincoln himself.

In return for his loyalty to the Whig Party, Lincoln expected recognition, but the possibilities were limited. After the expiration of his fourth term in the Illinois state legislature in 1841, he did not seek reelection; that assemblage offered no new worlds to conquer. Statewide office was out of the question because the Democrats had a hefty majority in Illinois. The state never voted for a Whig candidate for President, and it never elected a Whig governor or United States Senator. Only in the newly created Seventh Congressional District, which included Sangamon County, did the Whigs have a majority.

When John Todd Stuart made it clear that after two terms in Congress he was going to retire to his law practice, an intense rivalry arose among central Illinois Whigs to become his successor. In the western part of the Seventh District the handsome John J. Hardin of Jacksonville was the principal contender. In Sangamon County, Whigs were divided between Lincoln, the party workhorse, and Edward Baker, the flamboyant orator.

During 1843 Lincoln began quietly wooing delegates to the district convention that would choose the congressional candidate, but his efforts were frustrated by a whispering campaign. Citing Lincoln's marriage into a wealthy Edwards-Stuart elite, Baker's supporters began characterizing him "as the candidate of pride, wealth, and aristocratic family distinction." Lincoln was baffled. Surely everybody remembered that he was of hum-

ble origins. At the same time, it was said that Lincoln "belonged to no church, was suspected of being a deist, and had talked about fighting a duel."

Generously, Lincoln did not blame his friend Baker for these charges. But the combined effect of the accusations undermined Lincoln's strength at the Sangamon County convention, which endorsed Baker. Then it elected Lincoln to serve as one of the delegates to the district convention.

As it turned out, Baker lost the nomination to Hardin at the district convention, which met in Pekin in May 1843. Lincoln, though disappointed, could point to two gains. At his urging, the district convention adopted a resolution endorsing Baker "as a suitable person to be voted for" in the 1844 congressional election. Thus the delegates in effect stipulated that Hardin should serve only a single term, and they committed themselves to the principle of rotation in office. If maintained, this rule would almost guarantee that Lincoln would succeed Baker.

Equally important, the district delegates endorsed the practice of holding conventions to nominate candidates. Many Whigs felt that open political organization was not gentlemanly. They preferred to let aspiring candidates present their names directly to the public; if candidates lost in a primary, they were free to run as independents, but still as Whigs. Lincoln argued for more organization in the party; "union is strength" was his maxim. A proliferation of candidates resulted only in Whig defeats. Employing a phrase he would later put to better use, he reminded the party that "he whose wisdom surpasses that of all philosophers, has declared that 'a house divided against itself cannot stand.'" Reluctantly the Seventh District Whigs accepted his argument.

The next year, as he had arranged, the Whigs of central Illinois nominated Baker to succeed Hardin in Congress. Lincoln vigorously campaigned for his friend, and for Henry Clay, the Whig presidential candidate. There was little chance that Clay would carry Illinois, but Baker won in the Seventh District—and Lincoln was in line to succeed him. In the fall of 1845, a full year before the next congressional election, Lincoln

began working to secure the nomination. Getting a pledge from Baker not to run for a second term, he went to Jacksonville to talk to Hardin, who, he learned, had enjoyed his two years in the House of Representatives and gave the impression that he would like to serve another term. For the next six months Lincoln and Hardin tried to outmaneuver each other.

Lincoln's tactics were strikingly effective. In traveling the judicial circuit, he secured the endorsements of leading men throughout the district before anyone had an idea Hardin wanted to go back to Congress. By January, friends reported to Hardin that Lincoln had the nomination locked up. Anticipating defeat, Hardin withdrew from the race and saved face by joining the army for the fight against Mexico. The Whig district convention, which met on May 1 at Petersburg, gave Lincoln the nomination.

Lincoln's Democratic opponent was Peter Cartwright, a Methodist circuit rider, famed alike for his devotion to Christianity and to Jacksonian principles. Though Cartwright was personally popular, he was not an effective political campaigner, and his contest with Lincoln stirred little enthusiasm. Toward the end of the campaign, growing desperate, Cartwright asserted that Lincoln was an infidel. Troubled that this accusation might succeed, Lincoln published a handbill answering Cartwright's charges. While admitting that he was "not a member of any Christian Church," he denied ever having spoken "with intentional disrespect of religion" and declared that he could never "support a man for office, whom I knew to be an open enemy of, and scoffer at, religion."

Cartwright's charge had little effect. On August 3 the voters of the Seventh District elected Lincoln by an unprecedented majority.

After his election victory Lincoln could relax. Since the Thirtieth Congress did not assemble until December 1847, he had over a year to prepare for his move to Washington. For the most part, he spent his time contentedly attending to his family and cultivating his law practice. A daguerreotype made

about this time—his first photographic likeness—showed a young Congressman well satisfied with himself. He looked obviously proud of his tailor-made clothing, his carefully buttoned satin waistcoat, his intricately knotted black tie. Because of photographic distortion, his hands appeared even more enormous than they actually were. At this time Lincoln weighed about 160 pounds, and he was so thin that he appeared even taller than his six feet four inches. The daguerreotype also showed Lincoln's face as grave and unsmiling—probably because a sitter had to hold a pose for several seconds without moving—but it managed to convey a sense of a man who had attained his goals and was at peace with himself.

The Lincolns arrived in Washington on December 2, 1847, and went to Brown's Hotel before removing to the boardinghouse of Mrs. Anna C. Sprigg, where eight other Congressmen, all Whigs, boarded. The most notable of them was Joshua R. Giddings of Ohio, a stalwart and uncompromising enemy of slavery.

Initially both Lincolns found life in the capital exciting. Washington, with its 40,000 inhabitants—including 2,000 slaves and 8000 free blacks—was the largest, most cosmopolitan place either had ever known. The Capitol, which they could see from Mrs. Sprigg's windows, was an imposing, though still unfinished, structure, its temporary wooden dome suggesting the fragility of the Union.

As transients, the Lincolns were not admitted to the exclusive social life of long-term capital residents, but they could always find amusements. There were levees at the White House, and sometimes in the evenings there were lectures and concerts.

But Mary soon became dissatisfied. Her husband had little time to spend with her; indeed, he wrote later, he thought she "hindered me some in attending to business." She lacked female companionship, because few of the Congressmen were accompanied by their wives. In the spring Mary decided to take the children back to Lexington, where she stayed with her father.

Lincoln enthusiastically threw himself into the work of the House, establishing a conspicuous record for faithful attendance. Like other freshman Congressmen, he had a little stage fright when he first gained the floor to make a few remarks, but he got over it quickly. "I was about as badly scared, and no worse, as I am when I speak in court," he reported to Herndon.

Quickly he began to take the measure of his fellow Representatives. Unlike the Senate, where his old rival Stephen A. Douglas now joined such august solons as Daniel Webster and John C. Calhoun, the House, for the most part, was composed of men of mediocre ability and only local reputation. Apart from Giddings, whose presence Lincoln felt more as a moral than a political force, he was most taken by Alexander H. Stephens, a Georgia Whig who, like Lincoln, was looking for a way to rejuvenate the Whig Party.

Though the Whigs had done very well in the off-year elections of 1846, party leaders were troubled by the outlook for the 1848 presidential election. The Democratic administration of James K. Polk had been extraordinarily successful. Among other things, the President had settled the festering boundary dispute with Great Britain over the Oregon Territory, and he had presided over a highly successful war that was about to add California and New Mexico to the Union. Whigs recognized that it would be very difficult to defeat the Democrat most often mentioned as Polk's successor, Senator Lewis Cass of Michigan.

The only issue on which the Democrats appeared vulnerable was the President's role in originating the Mexican War. This was not a subject to which Lincoln hitherto had given much attention. Like every other American, he knew about the Texas revolt from Mexico in 1836. But in 1844, when President John Tyler urged the annexation of Texas to the United States, Lincoln branded the move as "altogether inexpedient" because, as he later declared, he "did not believe in enlarging our field, but in cultivating our present possession, making it a garden, improving the morals and education of the people."

He had nothing to say when Texas was annexed or when President Polk sought to settle long-standing claims against Mexico. In April 1846 fighting broke out between the Mexican army and American troops commanded by General Zachary Taylor in territory between the Nueces River and the Rio Grande, a region claimed by both the United States and Mexico. The United States declared war, and in Illinois there was a rush to enlist.

By the time Lincoln arrived in Washington, the fighting was substantially over. In hard-fought battles at Palo Alto, Resaca de la Palma, Monterey, and Buena Vista (where Lincoln's congressional predecessor, John Hardin, was killed), General Taylor repeatedly routed the Mexican forces in the North, while General Winfield Scott captured Vera Cruz and, eventually, Mexico City itself.

In December 1847 President Polk, in his annual message, asked Congress for additional funds to bring the war to a close, claiming the territories of New Mexico and California as partial indemnity. With a note of triumph he announced that he was about to conclude a war that Mexico had initiated by "invading the territory of the State of Texas, striking the first blow, and shedding the blood of our citizens on our own soil."

The message was the pretext for a sustained Whig attack upon the President. Lincoln, who served on the House Committee on Expenditures in the War Department, led the assault. On December 22 he introduced a series of resolutions requiring the President to provide the House with "all the facts which go to establish whether the particular spot of soil on which the blood of our *citizens* was so shed, was, or was not, *our own soil.*" He demanded that the President inform Congress whether that spot had ever been part of Texas. The reference earned him the enduring sobriquet "Spotty Lincoln." His clear intent, however, was to show that the American army had begun the war by making an unprovoked attack on a Mexican settlement.

Lincoln was aware that this course entailed a considerable risk; attacking the President's actions in beginning the war might easily be misunderstood as opposing the war itself.

Indeed, Democratic newspapers in Illinois were uniformly critical, calling Lincoln's speech "politically motivated" and even "traitorous." But working closely with Alexander H. Stephens and the small group of other Whigs in the House who called themselves the Young Indians, Lincoln thought he could resolve the difficulty. Whigs could assail the Democrats for having wrongly begun the war—and then demonstrate how loyally they supported their country's cause by nominating a general who was winning that war.

That general had to be Zachary Taylor. The general was totally ignorant of public affairs; nobody knew where he stood on anything. But Lincoln, eager to see new leadership in the Whig Party, jumped on the Taylor bandwagon. "I am satisfied we can elect him, that he would give us a whig administration, and that we can not elect any other whig," the young Congressman declared.

In early June, Lincoln attended the Whig National Convention at Philadelphia, where he attracted attention as the only Whig representative from Illinois. After the convention nominated Taylor on the fourth ballot, Lincoln, along with three other members of the House, addressed a ratification meeting in Wilmington, Delaware. Introduced as the Lone Star of Illinois, he received three hearty cheers as he predicted a Whig victory in the fall.

After Congress adjourned on August 14, Lincoln remained in Washington to work for Taylor's candidacy. Very busy during the hot Washington summer, he was also very lonely. Eagerly he read Mary's letters for news about the children, and he wrote them little letters. "Dont let the blessed fellows forget father," he enjoined his wife.

But he missed Mary most of all. His letters to her combined fatherly advice with mild flirtatiousness. When she began to think of returning to Washington, he wrote, "Will you be a *good girl* in all things, if I consent? Then come along, and that as *soon* as possible. I shall be impatient till I see you."

By the time she was ready to travel, Lincoln was leaving on a campaign tour of New England. Mary and the children joined

him. But fond as she was of sightseeing, she probably got little pleasure out of the trip because Eddie was sick. Certainly her husband was too busy to take much interest in historic landmarks. Appearing at Worcester, Massachusetts, on September 12, he gave an address that he repeated, with minor variations, in Boston, Lowell, Dedham, and other places.

New England Whigs were so opposed to slavery that they were ready to join antislavery Democrats in backing ex-President Martin Van Buren on the new Free-Soil ticket. Both Whigs and Free-Soilers, Lincoln told his audiences, "agreed that slavery was an evil, but that we were not responsible for it and cannot affect it in the States of this Union where we do not live." Both were opposed to the extension of slavery to the new territories. The only question, then, was which party could most effectively curb the expansion of slavery.

The Lincoln family went home from New England by way of Albany, where Thurlow Weed, the New York boss, introduced Lincoln to Millard Fillmore, the Whig vice presidential candidate. Then the family briefly visited Niagara Falls.

On his return to Illinois in October, Lincoln was chagrined to discover that the state's Whigs did not share his enthusiasm for the party's nominee. Many of them were troubled that the party was simultaneously opposing the Mexican War and backing a nominee who had helped win it. In the northern counties, recently settled by immigrants from New England, antislavery Whigs objected to the nomination of a southern slaveholder like Taylor. In his speeches Lincoln warned Whigs that support of the Free-Soil ticket in 1848 would help elect Lewis Cass as President. His warning was well taken, for Cass did indeed win Illinois with a vote less than that of the Whigs and Free-Soilers combined. But Lincoln could take satisfaction that in the Seventh Congressional District, Taylor's vote nearly equaled the record number Lincoln himself had received in 1846. He had done his part to bring about the election of a Whig President.

Next, he hoped, he could bring the party to adopt new principles. As soon as he returned to Washington in December—alone this time, for Mary and the children remained in

Springfield—he saw that the central issues facing the new session of Congress were those relating to slavery. He was, he said many times, "naturally anti-slavery," but he did not support any active measures to end it, because "the Congress of the United States has no power to interfere with the institution of slavery in the different States."

The extension of slavery was another matter. Like many of his contemporaries, Lincoln viewed slavery as an institution that would die out if it was confined to the areas where it already existed. It was important, therefore, not to permit slavery to go into free territory. But even on this issue Lincoln tried not to be doctrinaire. He took no part in the acrimonious debates over the Wilmot Proviso, which prohibited slavery in the territories acquired as a result of the Mexican War. But he found it impossible to avoid the issue completely, and on at least five occasions, when the proviso was an issue directly or indirectly, he voted for it. The debates, however, were beginning to tear his party apart.

FIVE

At the Head of His Profession

After the sojourn in Washington the Lincolns resettled back in their little house on Eighth and Jackson streets in Springfield. Lincoln resumed his partnership with William H. Herndon, and together they developed a sizable practice. Lincoln argued cases before the Illinois Supreme Court and before the United States Circuit and District courts. He found litigation in the federal courts fascinating, since cases there were likely to involve larger questions and greater fees than purely local litigation.

As business increased, the small back room in the Tinsley Building, to which Herndon had moved during Lincoln's absence, proved inadequate, and the partners rented a larger, second-floor office. It was a bare, unpretentious room, with two dirty windows looking out over sheds and an alley. One long table occupied the center of the room, with a shorter one crossing it to form a T, and both were covered with green baize. A bookcase containing about 200 lawbooks, along with a couch and some miscellaneous chairs, completed the furnishings. The office was almost never cleaned.

Unless they were on the circuit, both partners came in every morning and sat facing each other at opposite ends of the shorter table. From time to time, Lincoln would throw himself on the couch, resting his legs on two or three chairs or up against the wall, spilling himself out, as Herndon noted with ir-

ritable exaggeration, "easily over ¼ of the room." Often, to his partner's exasperation, Lincoln would read aloud from the daily newspapers or whatever book he was interested in. As he explained to Herndon, "When I read aloud my two senses catch the idea—1st I see what I am reading and 2ndly I hear it read; and I can thus remember what I read the better."

Every spring, after the adjournment of the Sangamon County Circuit Court, Lincoln set out on the round of other circuit courts in the Eighth Judicial District. There had been some changes during his two-year absence. For one thing he now found himself one of the senior lawyers. Though he was only forty, he was more and more frequently called—though never to his face—Old Abe, both because of his weather-beaten appearance and because of his many years in public life and at the bar.

Another change resulted from the election in 1848 of David Davis as judge of the Eighth Judicial District. Davis, a native of Maryland, had known Lincoln casually for a number of years, but now on the circuit the two men became closely acquainted. In appearance they were curiously mismatched. Davis, so portly that it was said he had to be surveyed for a pair of trousers, was a stickler for immaculate clothing; Lincoln, thin to the point of emaciation, seemed always to be hastily dressed. But in many ways Lincoln and Davis were alike. Both were devoted Whigs. Border-state men, they detested slavery but deplored abolitionist efforts to end it. In legal matters Davis, like Lincoln, took a commonsensical approach to the law.

So great was the judge's confidence in Lincoln that on numerous occasions, when called away from the bench by family illness or other emergencies, he designated Lincoln to preside in his stead. The practice of asking a prominent attorney to substitute for the judge was fairly common on the frontier, but only when the substitute was an attorney like Lincoln, who had the respect of the other members of the bar, were his rulings accepted without protest.

Lincoln's services were in demand everywhere on the circuit, mostly by younger attorneys who needed his assistance in presenting their cases to the court. With some he worked so fre-

quently that they came to think of themselves as his partners. With only one, Ward Hill Lamon of Vermillion County, was there anything like a formal arrangement. Lincoln was fond of the hard-drinking two-fisted young giant, with his endless repertory of off-color stories, and he and Lamon often appeared in court together.

In handling hundreds of cases in the circuit courts, Lincoln firmly reestablished his reputation for absolute honesty. He became known as Honest Abe, and he held himself to the highest standards of truthfulness. In notes for a lecture, written about 1850, he referred to the "vague popular belief that lawyers are necessarily dishonest" and warned: "Let no young man, choosing the law for a calling, for a moment yield to this popular belief. Resolve to be honest at all events; and if, in your own judgment, you can not be an honest lawyer, resolve to be honest without being a lawyer. Choose some other occupation."

Lincoln was also noted for his fairness to his opponents. He rarely objected when opposing counsel introduced evidence. According to Leonard Swett, a young Bloomington lawyer who traveled the circuit with Lincoln, "he would say he 'reckoned' it would be fair to let this in, or that." But this, Swett noted, did not mean he yielded essentials. Many a rival lawyer was lulled into complacency as Lincoln conceded, say, six out of seven points, only to discover that the whole case turned on the seventh. "Any man who took Lincoln for a simple-minded man," Swett concluded, "would very soon wake up with his back in a ditch."

Lincoln's legendary skill as a cross-examiner was clearly demonstrated in his most celebrated criminal case: the 1858 trial of William "Duff" Armstrong for the murder of James Metzker. Attending a religious meeting in August 1857, Armstrong, Metzker, and James Norris got into a fight, and Metzker was killed. Norris was accused of having hit Metzker on the back of his head with a piece of wood, and Armstrong was indicted for striking him in the eye. The two cases were separated, and Norris was convicted of manslaughter.

Armstrong's mother, Hannah, asked Lincoln to defend her son. Remembering his long friendship with the young man's father, Jack Armstrong, and Hannah's many kindnesses during his years in New Salem, Lincoln agreed. He accepted no fee.

The state's principal witness was Charles Allen, who testified that Armstrong struck Metzker. Though it was eleven at night and Allen was standing 150 feet away, he claimed he could see the attack clearly by the light of the nearly full moon shining overhead. On cross-examination Lincoln had Allen go through his story a dozen times, asking him to describe just what he had seen and how he was able to see it. Then, with the witness firmly committed to his story, Lincoln produced an 1857 almanac and read from it to show that at the time Allen claimed to have witnessed the attack, the moon had already set. Allen's credibility was demolished, and Armstrong was acquitted. Lincoln's skill in making the closing argument caused one journalist to place him "at the head of the profession in this state."

In May 1849, shortly after returning to Illinois from Washington, Lincoln learned that his father was dying of a heart disease. Since 1840 the elder Lincolns had been living in a double log cabin on a 120-acre farm on Goosenest Prairie, in Coles County. From time to time, when Lincoln's work on the circuit brought him near Coles County, he would visit his parents, and although his attitude toward his father was ambivalent, Lincoln tried to help when Thomas got into financial difficulties. Now his stepbrother, John D. Johnston, wrote to say that Thomas Lincoln was in failing health. "He Craves to See you all the time," Johnston wrote, "and he wonts you to Come if you ar able to git hure, for you are his only Child that is of his own flush and blood." Lincoln rushed off to see his father, probably missing a letter from a Hanks relative assuring him that Thomas Lincoln had no heart disease after all and would "doubtless be well in a Short time."

The next winter, when Johnston wrote him two more letters about Thomas Lincoln's declining health, Abraham Lincoln did not respond. He thought his stepbrother was again crying wolf.

Only after he heard independently from another relative did he write to explain why he could not come to his father's sickbed. "My business is such that I could hardly leave home now," he said; besides, his wife was "sick-abed" with "baby-sickness."

Both excuses had some plausibility. A trip by buggy to Coles County would take three days each way, at a time when Lincoln had cases before the courts almost every day. But if he had truly wanted to go, he could have entrusted his cases to his partner. It was also true that Mary had given birth to their third son on December 21, 1850. She doubtless would have been highly nervous if Lincoln left home while she was caring for a newborn baby. But again there were neighbors who could have helped her.

Unable to simulate a grief he did not feel or an affection he did not bear, Lincoln did not attend his father's funeral. He was not heartless, but Thomas Lincoln represented a world that his son had long ago left behind.

During the years of his father's final illness, Lincoln had also to deal with family crises closer to home. In December 1849 his second son, Edward Baker, always a feeble child, became sick with pulmonary tuberculosis. After fifty-two days of acute illness the little boy, who was not quite four, died on February 1, 1850. Both parents were devastated. Lincoln, as always, internalized his emotions, saying only, "We miss him very much." For his wife, Eddie's death, coming shortly after the deaths of both her father and her beloved grandmother, was harder to bear. Restlessly she kicked against the pricks of fate, and more than two years after Eddie's death she wrote a Kentucky friend, "I grieve to say that even at this distant day, I do not feel sufficiently submissive to our loss."

A few weeks after Eddie's death she was expecting again. The Lincolns clearly intended to replace the lost boy. The baby was named William Wallace Lincoln, after her physician brother-in-law who had been so helpful during Eddie's final days. Willie was the most intelligent and the best-looking of all the Lincoln children, and from the day he was born, his father doted on him.

Then, because Willie needed a playmate, Mary in 1853 gave birth to a fourth child, another boy, whom they named Thomas

after his recently deceased grandfather. The choice of the name suggested that Abraham Lincoln's memories of his father were not all unpleasant—and perhaps it hinted at guilt for not having attended his funeral. Lincoln playfully called the infant a little tadpole, and the nickname Tad stuck to him for the rest of his life.

After the birth of Tad, it may have been impossible for Mary to have additional children. The delivery had been difficult, and it left her for the rest of her life as "more or less a sufferer" from what she called, with Victorian propriety, troubles "of a womanly nature."

By the mid-1850s the nature of Lincoln's law practice gradually changed, as increasingly his time was taken up with suits relating to the railroads. Wherever railroads ran, there were legal problems concerning such issues as charters and franchises, right-of-way, evaluation and taxation, the duties of common carriers and the rights of passengers, and merger, consolidation, and receivership. Lincoln, like other lawyers, found the ensuing litigation a major source of income.

Long an advocate of improved transportation as the key to economic development, Lincoln took on his first significant railroad case in 1851 for the Alton & Sangamon Railroad. The following year he made his first appearance for the powerful Illinois Central Railroad, which he also represented in numerous subsequent cases.

In addition to greatly increasing Lincoln's income, the coming of the railroads made a difference in his family life. Up through 1853 his semiannual trips around the Eighth Judicial Circuit kept him away from home for weeks at a time. But with the spread of the rail network, it became possible for him to come home weekends and to devote more time to the needs of his family while keeping his full load of cases on the circuit court.

After the death of one child and the birth of two others, Mary was not in good physical or emotional shape, and her behavior was unpredictable. Weeks of quiet family life could go by, with

pleasant meals and long evenings of reading together by the fire. Naturally cheerful and lively, Mary would entertain her husband with accounts of the latest novel she was reading, with neighborhood gossip, and with speculation about politics, in which she retained an unladylike interest. She was kind toward her neighbors, and when she was feeling well, there would be parties and games for the children. Then something would trigger her temper. Perhaps she was simply bored with being cooped up in a tiny house. Perhaps she was affected by the mental instability that was evident in several other members of her family. At any rate, she sometimes unpredictably flew off the handle at her husband. On one occasion, as Springfield gossip remembered years later, she chased him out of the house and down the street with a butcher knife—or maybe it was a broomstick. Her outbursts were usually short-lived, and afterward she felt ashamed and ill. Lincoln did not scold her, but tried to offer her the constant support and reassurance she needed.

Now that he spent most weekends in Springfield, Lincoln could see more of his children. He was away so much while Robert was growing up that he never developed a close bond with his oldest son, but he was devoted to Willie and Tad. When they were small, he would haul them around in a wagon. When the boys were a little older, they used to walk with him downtown, each holding on to a gigantic hand or perhaps his coattail. Inevitably one would complain that he was tired, and he would be hoisted on Lincoln's shoulders for a ride home.

On Sundays, while Mary was at church, Lincoln often brought the boys with him to the law office, where Herndon found them a nuisance. "These children," Herndon remembered, "would take down the books—empty ash buckets—inkstands—papers—gold pens—letters, etc. in a pile and then dance on the pile. Lincoln would say nothing, so abstracted was he and so blinded to his children's faults." Years later Herndon recalled that he often "wanted to wring their little necks and yet out of respect for Lincoln I kept my mouth shut."

Herndon's animus toward the Lincoln children reflected his dislike, verging on hatred, of their mother. He never got along with Mary Todd Lincoln. When he first met her in 1837, she was a visiting belle from Kentucky and he asked her to dance. Intending to compliment her, he observed that she "seemed to glide through the waltz with the ease of a serpent." Miss Todd, never distinguished by a sense of humor, flashed back, "Mr. Herndon, comparison to a serpent is rather severe irony, especially to a newcomer," and she left him on the dance floor. Neither forgot the episode.

Herndon strongly opposed Lincoln's courtship of Mary, who he thought was "imperious, proud, aristocratic, insolent and bitter." Doubtless Mary disliked her husband's choice of Herndon as a law partner. In her judgment Herndon ran with a rowdy set, and she knew that from time to time he was known to take too much to drink. But she recognized that the law practice was her husband's sphere of activities, and she managed to maintain formal, if distant, relations with his partner.

The antagonism between his wife and his law partner, which might have driven another man to distraction, troubled Lincoln not at all. Indeed, he rather thrived on the creative tension between Billy and Mary, both of whom were devoted to his interests but wanted his undivided attention. The knowledge that Mary was jealously watching helped spur Herndon to more care in the office, and the awareness that Herndon was a critical observer doubtless did something to curb Mary's temper.

The years following Lincoln's return from Congress were, then, relatively peaceful. According to an 1860 campaign biography, Lincoln, after turning from politics to law, was "successful in his profession, happy in his home, secure in the affection of his neighbors, with books, competence, and leisure—ambition could not tempt him."

SIX

There Are No Whigs

The biographer's description of Lincoln in retirement was accurate enough, but it did not capture the whole picture. During the years after his service in Congress, Lincoln never truly lost interest in politics. He continued to think about the nation's problems and about how he could help solve them. As always, he yearned for distinction, but opportunities were few and he often felt melancholy about his future. "How hard," he remarked to Herndon, "oh how hard it is to die and leave one's Country no better than if one had never lived for it."

Though Lincoln declined to run for another term in Congress in 1850, he remained active in party management. Privately he advised Richard Yates, the ambitious young Whig seeking election to the congressional seat Lincoln had occupied. In the 1852 presidential campaign, when the party nominated Winfield Scott, Lincoln made a rollicking attack on Franklin Pierce, the Democratic nominee. But his speeches during the campaign were generally lackluster, suggesting he was not entirely happy in this role of elder statesman.

There were other hints of Lincoln's unhappiness. Some days he would arrive at the office in a cheerful mood, but then, resting his chin on the palm of his left hand, he would sit for hours in silence, staring vacantly out the window. Other days he was so depressed he did not even speak to Herndon.

Lincoln's companions on the circuit noticed his moodiness. Henry Clay Whitney, who began traveling Judge Davis's circuit after 1854, reported that Lincoln was afflicted by nightmares. One night when they were sharing a room, Whitney woke to see his companion "sitting up in bed, his figure dimly visible by the ghostly firelight, and talking the wildest and most incoherent nonsense all to himself."

Herndon attributed Lincoln's melancholy to domestic unhappiness; others, with about as much evidence, found the cause in his chronic constipation or in the blue pills he took to overcome it. Perhaps there was truth in these theories, but they missed the essential point that Lincoln was unhappy with a political career that seemed to be going nowhere. He remarked that while his old rival Stephen A. Douglas, now the most powerful member of the United States Senate, was "a giant," Lincoln remained, as he said, one of the "common mortals."

Though out of office, Lincoln had no intention of being out of the public eye. When Zachary Taylor died in July 1850, Lincoln was attending court in Chicago and was invited to memorialize the late President. His address, delivered as a duty, was largely a pedestrian recital of the facts of Taylor's life, interrupted by an occasional rhetorical flourish. But it helped keep Lincoln's name before the growing population of northern Illinois.

Only slightly more successful was the eulogy he delivered in Springfield about Henry Clay. Although Lincoln's analytical cast of mind kept him from indulging in effusive praise of anyone, his eulogy came alive when he dealt with Clay's views on slavery. Clay, he said, "did not perceive that on a question of human right, the negroes were to be excepted from the human race." Consequently, said Lincoln, "he ever was, on principle and in feeling, opposed to slavery." Because Clay recognized that it could not be "at once eradicated, without producing a greater evil," he supported the efforts of the American Colonization Society to transport African Americans back to Africa.

Endorsing Clay's views on colonization, Lincoln revealed a change in his own attitude. He had all along been against slav-

ery, but it had not hitherto seemed a particularly important issue, partly because he had little personal knowledge of it. But in Washington he found slavery a perpetual source of offense and embarrassment. Only seven blocks from the Capitol stood the warehouse of Franklin & Armfield, the country's largest slave traders. This notorious slave trade, which offended many southerners as well as northerners, was the source of repeated taunts from foreign observers who pointed out the irony of men and women being sold within sight of the Capitol of a nation supposedly dedicated to liberty.

As Lincoln looked for a rational way to deal with the problem, he became convinced that transporting African Americans to Liberia was the answer. The plan was wholly impracticable. American blacks, nearly all of whom were born and raised in the United States, had not the slightest desire to go to Africa. Nevertheless, Lincoln persisted in his colonization fantasy until well into his presidency. Southern whites, he believed, would more willingly manumit their slaves if they were going to be shipped off to Africa. At the same time, northerners would give more support for emancipation if freedmen could not migrate to the free states to compete with white laborers.

For a man who prided himself on his rationality, his adherence to such an unworkable scheme was puzzling, though not inexplicable. His advocacy of colonization served an unconscious purpose of preventing him from thinking too much about a problem he found insoluble. He confessed that he did not know how slavery could be abolished: "If all earthly power were given me, I should not know what to do, as to the existing institution." Even if he had a plan, there was no way of putting it into effect. After the Compromise of 1850—which, among other things, admitted California as a free state, permitted the inhabitants of the New Mexico and Utah territories to make their own choice about slavery, and gave the South a stringent new fugitive-slave law—both Whigs and Democrats had agreed that, in Lincoln's words, questions relating to slavery were "settled forever." For a man with a growing sense of urgency about abolishing, or at least

limiting, slavery, who had no solution to the problem, colonization offered a very useful escape.

Early in 1854 reality replaced fantasy. Stephen A. Douglas, the chairman of the Senate Committee on Territories, introduced a bill to establish a government for the Nebraska Territory. Slavery had been prohibited in this area by the Missouri Compromise of 1820, but southerners, fearful of the growing population and wealth of the North, had killed previous efforts to organize Nebraska as a free territory. Douglas sought to avoid a similar fate for his new bill by providing that the territory "be received into the Union, with or without slavery, as their constitution may prescribe." When proslavery Senators pressed him to include an explicit repeal of the Missouri Compromise, Douglas reluctantly agreed. At the same time, he assented to the division of the region into two territories—Kansas and Nebraska. Endorsed by the Pierce administration, the Kansas-Nebraska Act was passed by Congress after a bitter struggle and became law on May 30.

In Illinois, as throughout the North, there was a firestorm of opposition. New England–bred abolitionists found in the Kansas-Nebraska Act the occasion to launch a new antislavery party, which they christened Republican. In southern Illinois, Democrats feared that opening Kansas to slaveholders would prevent the settlement of small farmers like themselves. Violently negrophobic, voters in this section wanted to have nothing to do with abolitionism; they fought under the banner of anti-Nebraska Democrats.

There were further political divisions as a rising tide of immigration fed American nativist sentiment. In Illinois the large number of foreign-born who came to build the railroad aroused fear of foreign tongues and behavior and of the Catholic Church, to which many immigrants belonged. Fear became resentment when the recession of 1854–55 put a temporary halt to railroad construction and threw immigrant laborers into competition with native-born workers. Native-born Protestants began to join secret societies like the Order of the Star-Spangled

Banner, which advocated lengthening the term for naturalization and restricting the rights of the Catholic Church. Just how large the order was, nobody could tell, because members were sworn to reply to questions from outsiders with "I know nothing." When the order, styling itself the Native American Party, entered politics and secretly endorsed candidates, it seemed to pose more of a threat to normal political alignments than even the agitation over Kansas-Nebraska.

Lincoln had no sympathy for nativism, but he had to recognize that these Know-Nothings were a powerful political force. In public his position was circumspect. With the political situation so confused, he also held back on the Kansas-Nebraska issue until the end of August, when he spoke at the Scott County Whig convention. There he attacked "the great wrong and injustice of the repeal of the Missouri Compromise, and the extension of slavery into free territory."

Once he decided to take part in the fall congressional campaign, Lincoln devoted all his time to the anti-Nebraska cause. He became, in effect, Richard Yates's campaign manager, spending hours advising the Whig candidate. Speaking before a large group in Springfield, with Douglas in attendance, Lincoln sought to make the important distinction between slavery in the existing states, which was guaranteed under the Constitution, and the extension of slavery, for which there was no such authority.

Douglas and others who favored the Kansas-Nebraska Act argued that "the sacred right of self government" required that restrictions on slavery be removed so the residents of the territories could decide for themselves whether to admit or exclude it. Lincoln conceded that of course the inhabitants of the territories should make their own laws, and these should not be interfered with any more than "the oyster laws of Virginia, or the cranberry laws of Indiana." But whether they could permit or exclude slavery depended upon "whether a negro is *not* or is a man."

Here Lincoln reached the crux of his disagreement with Douglas. Douglas, Lincoln said, "has no very vivid impression

that the negro is a human: and consequently has no idea that there can be any moral question in legislating about him." But to Lincoln, the African American was very much a man. The Declaration of Independence taught him that all men, even men of limited abilities and prospects, are created equal. Because the Negro was a man, there could be no moral right to slavery. "No man," Lincoln announced, "is good enough to govern another man, *without that other's consent*. I say this is the leading principle of American republicanism."

Though Lincoln's argument was terse and powerful, his audience found little in its substance that was new. After all, the Kansas-Nebraska issue had been before the American people for nine months, and the act had been repeatedly attacked from almost every conceivable direction. What listeners did find different in Lincoln's speech was his tone of moral outrage when he discussed "the monstrous injustice of slavery." "There can be no moral right in connection with one man's making a slave of another," he thundered. It followed, then, that the extension of slavery into the territories and "to every other part of the wide world, where men can be found inclined to take it," was equally wrong.

It was a remarkable address, more elevated in sentiment and rhetoric than any speech Lincoln had previously made, and when he finished, the women in the audience waved their white handkerchiefs in support and the men gave continuous hurrahs.

Douglas took the floor immediately and offered a rebuttal that lasted nearly two hours. But in the next few days there was considerable evidence in the newspapers and elsewhere that Lincoln had made an immense impression.

In the fall elections voters across the North repudiated Douglas and the Kansas-Nebraska Act. Twenty-nine of the thirty-one New York Representatives elected were anti-Nebraska men, and so were twenty-one out of the twenty-five Pennsylvania Representatives. Every Congressman in Ohio was an opponent of Kansas-Nebraska, as were all but two in

Indiana. Illinois joined the movement. Though the anti-Nebraska coalition in Illinois failed to reelect Yates to Congress, choosing instead Douglas's loyal lieutenant, Thomas L. Harris, the Democrats could boast of few other victories. Anti-Nebraska forces would control the next general assembly, whose principal duty would be to elect the next United States Senator from Illinois.

Even before the makeup of the new legislature was clear, Lincoln began to campaign for that office. He had been thinking about the prospect for some time, and once the election turned out so favorably for the anti-Nebraska coalition, he sprang into action. Appealing mainly to members of the Whig Party, he asked various correspondents to "make a mark for me" with members of the new legislature. "It has come round that a whig may, by possibility, be elected to the U.S. Senate," he wrote one new legislator; "and I want the chance of being the man."

Many of the responses to Lincoln's letter-writing campaign were all he could have hoped for. "It will give me pleasure to do what I can for your appointment to the Sennet," wrote one correspondent. Elihu B. Washburne, who had just been elected to Congress from the Galena district as a Republican, earnestly recommended Lincoln to the northern Illinois Republicans as "a man of splendid talents, of great probity of character," who at Springfield had "made the greatest speech in reply to Douglas ever heard in the State."

When the legislature assembled on January 1, 1855, Lincoln believed he had 26 members committed to his election—more than twice as many as pledged to any other candidate. He needed 25 more votes. By his estimate, 43 of the 100 members of the general assembly were Douglas Democrats, none of whom would vote for Lincoln. Douglas insisted that all true Democrats must endorse the Kansas-Nebraska Act and support James Shields, Douglas's loyal ally in the Senate. In order to win, therefore, Lincoln had to have the backing of nearly every anti-Nebraska legislator.

Throughout January, Lincoln constantly lobbied for election. David Davis temporarily threw aside his judicial robes to help

plan Lincoln's legislative strategy. Stephen Logan, Lincoln's former law partner and now a member of the House of Representatives, became his floor manager, entrusted with making necessary deals to secure the support of the northern antislavery members. Herndon did all he could to influence the abolitionist element, while Leonard Swett and Ward Hill Lamon buttonholed uncommitted legislators.

As a result of these efforts, Lincoln steadily gained strength during the early weeks of the legislative session, but as January 31, the scheduled day for the election, approached, he still was about 3 votes short of a majority.

A small group of independent Democrats held the balance of power in the legislature—men like Norman B. Judd of Chicago, who had been a loyal Democrat all his life but had broken with Douglas over the Kansas-Nebraska Act. These anti-Nebraska Democrats had no personal objection to Lincoln, but they announced that "having been elected as Democrats they could not vote for any one but a Democrat for US senator." Their candidate was Congressman Lyman Trumbull from Alton, Illinois.

Voting was delayed by a fierce snowstorm, which isolated Springfield for twelve days and prevented the assembling of a quorum in the state legislature. But in the initial ballot, on February 8, the results were pretty much what Lincoln had anticipated. He led with 45 votes, to Shields's 41. Trumbull had 5.

The one vote cast for Governor Joel A. Matteson suggested the Democrats' strategy. Aware that they probably could not achieve consensus and elect Shields, the Illinois Democrats rejected Douglas's advice and quietly began rallying around the governor. Matteson had said just enough in favor of the Kansas-Nebraska Act not to offend Douglas but, in private, had expressed enough opposition to convince many of Douglas's enemies.

The Democrats stuck with Shields for six ballots, and then, by prearrangement, switched to Matteson on the seventh. Lincoln's vote was dwindling, while Trumbull's was increasing. On the ninth ballot Lincoln was down to 15 hard-core loyalists, while Trumbull had 35 votes, and Matteson, with 47, needed only 3 votes to be elected. Lincoln promptly directed that his 15

remaining supporters go for Trumbull on the tenth ballot. Though bitterly disappointed, his followers loyally cast their votes as he directed. On the tenth ballot Lyman Trumbull was elected to the United States Senate.

After his defeat Lincoln was so dejected that he told a friend that "he would never strive for office again," because "he could bear defeat inflicted by his enemies with a pretty good grace—but it was hard to be wounded in the house of his friends."

For a full twelve months after his defeat Lincoln devoted himself to his law business, trying, as he said, "to pick up my lost crumbs of the year." Nevertheless, he kept up an active interest in politics. Following events closely, he was obliged to recognize that the Whig Party was dying. For some years Whig economic policies calling for federal promotion of economic growth had been sounding less realistic, and the prosperity that followed the discovery of gold in California in 1848 made the party's program obsolete. A practical man, Lincoln knew that in America "the man who is of neither party, is not—cannot be, of any consequence." But it was not clear what party he should choose. When his old friend Joshua F. Speed inquired where he stood, he replied, "That is a disputed point. I think I am a whig; but others say there are no whigs, and that I am an abolitionist." But, he went on to explain, he resented efforts to "unwhig" him, since he was doing no more than oppose "the *extension* of slavery," which had long been the position of most northern Whigs.

By the end of 1855 he found it easier to choose his political course. What was needed in Illinois was what had already taken place in many other northern states—a fusion of all the opponents to the extension of slavery into a new political party.

Lincoln was ready to take the lead. In January 1856, when a conference of anti-Nebraska editors convened to plan for the next presidential election, Lincoln was the sole nonjournalist in attendance. With his guidance the group drafted a conservative declaration that called for the restoration of the Missouri Compromise and pledged noninterference with slavery in the

states where it already existed. To appease the more radical antislavery element, the resolutions also affirmed the basic Free-Soil doctrine, which held that the United States was founded on the principle that freedom was national, and slavery exceptional. To win foreign-born voters, the platform advocated religious toleration and opposed any changes in the naturalization laws. To attract the Know-Nothings, it denounced "attacks" on the common school system—meaning Catholic efforts to secure aid for parochial schools. Still avoiding the name Republican, the conference called for a state fusion convention to be held in Bloomington on May 29.

On the night the conference adjourned, the editors attended a banquet, where Lincoln played a conspicuous role. When one speaker suggested that he ought to be the candidate of the new party for governor, he refused. But in response to a toast praising him "as the warm and consistent friend of Illinois, and our next candidate for the U.S. Senate," he rose after prolonged applause and said, "The latter part of that sentiment I am in favor of." He went on to announce "his hearty concurrence in the resolutions adopted by the Convention" and "his willingness to buckle on his armor" for the coming fight with the Democrats.

On May 29 about 270 delegates assembled in Major's Hall to organize the Illinois Republican Party. All shades of opinion were represented: conservative Whigs like Lincoln, anti-Nebraska Democrats, Know-Nothings, and abolitionists. The new party's platform was one on which all could stand. It offered a mild declaration that Congress had the power and the duty to exclude slavery from the national territories.

The delegates recognized Lincoln's role in creating the new party by inviting him to make the last major speech before adjournment. Obviously delighted that the proceedings had gone so smoothly, he gave what was universally acclaimed as the best speech of his life. Because he spoke extemporaneously, there was no reliable record of what he said. Even Herndon, who usually took notes when his partner spoke, gave up after about fifteen minutes and, as he said, "lived only in the inspiration of the hour." Only the Alton *Weekly Courier,* in a brief report, gave

the highlights of this major address. After enumerating "the pressing reasons of the present movement," Lincoln identified slavery as the cause of the nation's problems and urged a union of all who opposed its expansion. If the united opposition of the North caused southerners to raise "the bugbear [of] disunion," they should be told bluntly, "The Union must be preserved in the purity of its principles as well as in the integrity of its territorial parts." Firmly he made Daniel Webster's thundering declaration the motto of the Republican Party: "Liberty and Union, now and forever, one and inseparable."

"His speech was full of fire and energy and force," Herndon recalled; "it was logic; it was pathos; it was enthusiasm; it was justice." To his partner, Lincoln seemed seven feet tall that day.

Lincoln recognized that the Republican Party faced formidable problems in the 1856 presidential contest. Not only was it a new and imperfectly articulated organization, but it had powerful competition. Shrewdly the Democrats passed over the controversial Douglas and nominated James Buchanan, a former Secretary of State, who had the inestimable blessing of having been out of the country, as minister to Great Britain, during the controversy over the Kansas-Nebraska Act. The nativists, now calling themselves the American Party, nominated ex-President Millard Fillmore, whose highly respectable Whig antecedents made him attractive to conservatives of all persuasions.

To counter the appeal of these two conservative candidates, Lincoln thought it important for the Republican Party, holding its first national convention in Philadelphia on June 17–19, to recognize that nine tenths of the anti-Nebraska voters had formerly been Whigs. He wrote Trumbull that the nomination of Supreme Court Justice John McLean of Ohio "would save every whig, except such as have already gone over hook and line" to the Democrats. The Philadelphia convention did not follow his advice, nor did it nominate either of the most conspicuous leaders in the Republican movement—Senator William H. Seward of New York or Senator Salmon P. Chase of Ohio. Instead, it chose the highly popular explorer John C. Frémont,

widely known as the Pathmarker of the West because of his explorations of the Rocky Mountains.

But when it came to selecting a vice presidential nominee, the delegates did look to former Whigs. The most popular candidate was William L. Dayton, a former Senator from New Jersey. Unhappy that the new party was failing to recognize the importance of the Northwest, Illinois delegates arranged to have Lincoln's name put into nomination. But the Illinois movement got under way after most of the delegates were already committed to other candidates. In an informal ballot for vice presidential nominee, Dayton received 253 votes to Lincoln's 110.

The nomination of Frémont for President did not discourage Lincoln. He entered the campaign wholeheartedly, making more than fifty speeches in his effort to win over Fillmore's supporters to the Republican cause. But with the antislavery vote split, Buchanan carried Illinois and won the election.

SEVEN

A House Divided

After the 1856 elections Lincoln turned to his law practice with great assiduity, and 1857 became the most profitable year of his professional life. He frequently argued cases in the United States courts, both in Springfield and in Chicago, and since these suits often involved greater issues, they brought larger fees than trials in the local courts.

This was perhaps the happiest time of Mary Lincoln's life. Her marriage to one of the leading public figures in Illinois satisfied her need for status, and her husband's more than respectable income soothed her chronic anxiety over financial insecurity. She could now turn to expanding the family's mean little cottage, and by April 1856 Springfield was buzzing about the changes that the Lincolns were making.

The construction was completed while Lincoln was away on the circuit, and he returned to find the cottage transformed into a handsome two-story Greek Revival house, tastefully painted chocolate brown with dark green shutters. Pretending bewilderment, he sauntered up to a neighbor. "Stranger, do you know where Lincoln lives?" he asked. "He used to live here." As often happened, his humor miscarried, and it was reported that Mary Lincoln had remodeled the house without her husband's knowledge. Of course he had known about it, but he did complain to his wife about the cost. Thereafter she developed the habit of concealing her expenditures from him.

Adding a full second story to the house at least doubled the Lincolns' living space. Mr. and Mrs. Lincoln now had separate, but connecting, bedrooms. This was not a signal that sexual relations between husband and wife had ended; it was the arrangement recommended for well-to-do couples by fashionable interior decorators. Separate bedrooms also meant that Mary was less frequently disturbed by her husband's insomnia and nightmares. Robert now had his own room on this floor, and Willie and Tad shared one adjacent to it. There was a handsome guest room and, at the rear, a maid's room.

The remodeled Lincoln house was not a mansion like the Edwardses', but it was one of the best in Springfield. It was the center of Mary's world. Finally she felt comfortable. Her children were old enough not to require constant supervision, and for the first time since her marriage, she had time to read and to write long, gossipy letters to friends and relatives.

She also felt able to entertain properly. She preferred to give large buffet suppers, like the entertainment she offered in February 1857 for her husband's forty-eighth birthday. Five hundred guests were invited, and it was not clear how she expected to squeeze all those people in. Fortunately, a heavy rainstorm and a conflicting engagement kept many of them away. Even so, about 300 had a chance to see her newly expanded home.

In part the Lincolns' hospitality was designed to maintain his network of political friends, because public office was never far from his mind. He was not dispirited by the outcome of the 1856 elections. Buchanan was chosen President only because the opposition vote was split between Frémont and Fillmore, who together had a majority of 400,000.

A decision handed down by the United States Supreme Court on March 6, 1857, two days after Buchanan's inauguration, made a future Republican victory more likely. The ruling concerned the fate of Dred Scott, a Missouri slave, who had been taken by his owner, first to Illinois, a state where slavery was prohibited, and subsequently to Fort Snelling, in Minnesota Territory, from which slavery had been excluded by the

Missouri Compromise. After returning with Scott to Missouri, his master died. Scott sued for his freedom on the ground that he had been resident first of a free state and then of a free territory. The case eventually reached the Supreme Court.

Speaking for a majority, Chief Justice Roger B. Taney ruled that Scott was not entitled to sue, because, as a Negro, he was not a citizen of the United States. At the time the nation was created, Taney pronounced, blacks were considered "so far inferior that they had no rights which the white man was bound to respect" and the founding fathers had not included them in either the Declaration of Independence or the Constitution. Further, residence of free territory did not entitle Scott to freedom, since all congressional enactments that excluded slavery from the national territories were "not warranted by the constitution" and were "therefore void."

Throughout the North, antislavery spokesmen erupted in denunciations of the decision. Opposition from clergymen was especially fierce.

But Lincoln, like most Illinois Republican politicians, was slow to react. This seeming indifference stemmed in part from the complexity of the Court's decision. The justices offered nine separate opinions, none addressing exactly the same issues. Two were strong dissenting opinions by antislavery Justices John McLean and Benjamin R. Curtis. An initial examination of the opinions failed to give Lincoln cause for alarm. As he explained later, he "never . . . complained *especially* of the Dred Scott decision because it held a negro could not be a citizen"; he agreed with Taney on this subject. But he was deeply troubled by the Chief Justice's gratuitous assertion that neither the Declaration of Independence nor the Constitution was ever intended to include blacks. Lincoln declared that Taney was doing "obvious violence to the plain unmistakable language of the Declaration." So gross was the Chief Justice's distortion of the documents fundamental to American liberty that Lincoln's faith in an impartial, rational judiciary was shaken; never again did he give deference to the rulings of the Supreme Court.

Lincoln kept these views to himself until June, when Douglas returned to Illinois and made a major address at Springfield defending the "honest and conscientious" Justices who had handed down the Dred Scott Decision. Two weeks later Lincoln offered the Republican reply to the Senator. "We think the Dred Scott decision is erroneous," he declared unequivocally. The authors of the Declaration of Independence never intended "to say all were equal in color, size, intellect, moral developments, or social capacity," but they "did consider all men created equal—equal in 'certain inalienable rights, among which are life, liberty, and the pursuit of happiness.'"

Lincoln charged that the Chief Justice and the senior Senator from Illinois were working together, with other Democrats, to extend and perpetrate the institution of slavery. This was to be Lincoln's basic strategy for the upcoming 1858 elections, which would choose members of the state legislature that would name the next United States Senator. Lincoln believed that Douglas was vulnerable, and this time he had no intention of waiting for the outcome of the elections before announcing his own campaign for the Senate.

In planning for the election, Lincoln gathered around him a group of dedicated advisers. Some were familiar faces from his earlier campaigns. Herndon was, as ever, valuable because of his contacts among abolitionists. Other close political friends such as Ward Hill Lamon, Leonard Swett, Judge Davis, and Norman B. Judd kept an eye on developments in various parts of the state.

By fall, events in Kansas and Washington made it necessary for Lincoln and his advisers to be especially alert. The Kansas Territory was in turmoil. The area was still technically an Indian reserve, and no effort had yet been made to settle Indian claims. Land claims could only be defended by the six-shooter and the bowie knife. Inevitably, there was friction among the settlers. By opening the territory to slavery, the Kansas-Nebraska Act served as a challenge to antislavery forces, which began funneling in free-state immigrants equipped with rifles

and ammunition. Proslavery forces in Missouri countered by pouring over the border, ready to fight to keep Kansas a slave state.

The national newspapers gave incessant coverage to proslavery "outrages" in Kansas. In the hope of ending the bloodshed, President Buchanan, along with many Democrats, favored the speedy admission of Kansas as a state, and in February the territorial government ordered an election for a constitutional convention.

It was, as Lincoln remarked, "the most exquisite farce ever enacted." Free-Soilers, certain the election was rigged to favor the proslavery faction, stayed home, and only about 2,200 out of 9,000 registered voters participated. Nevertheless, the delegates assembled in Lecompton, Kansas, in September and October, drew up a constitution and submitted it for the approval of the President and Congress. A proslavery document, it guaranteed not merely that the 200 or so slaves already in Kansas would remain in bondage but that their offspring should also be slaves. Eager to have the Kansas crisis settled, Buchanan approved the Lecompton Constitution and recommended it to Congress.

Douglas decided to oppose it. He knew he was facing a strenuous reelection campaign in Illinois, where Lincoln almost certainly would be his opponent. He had lost much strength by his advocacy of the Kansas-Nebraska Act, and his endorsement of the Dred Scott Decision, even though tepid, had cost him more. Support of the patently proslavery Lecompton Constitution would weaken him even further. Aside from political considerations, Douglas felt that the document subverted his cardinal principle—popular sovereignty—because it denied the inhabitants of Kansas the right to choose their own form of government. Breaking with President Buchanan, Douglas vowed to "make the greatest effort of his life in opposition to this juggle."

Douglas's opposition to Lecompton and to the President delighted Republicans. Horace Greeley, the influential editor of the New York *Tribune,* announced that Douglas's course was not merely right but "conspicuously, courageously, eminently so."

Greeley and other Republicans began conferring with the Senator on ways to defeat the measure.

Lincoln's initial reaction to what he called the "rumpus" among the Democrats over Lecompton was to urge Republicans to stand clear of the quarrel. He was convinced that Greeley and others were walking into a trap. Lincoln's suspicions increased when Herndon, making a pleasure trip to the Northeast, reported that prominent eastern Republicans favored Douglas's reelection and that Horace Greeley thought Illinois Republicans were fools to oppose him.

Resentful of outside interference, Illinois Republicans spurned the suggestion that they drop Lincoln and back Douglas for reelection. Such a shift was impossible, Herndon angrily wrote Greeley. "Douglas' abuse of us as Whigs—as Republicans—and men in society, and as individuals, has been so slanderous that we cannot soon forgive and can never forget."

To prevent any erosion of Republican solidarity, Lincoln's friends began carefully planning for the fall elections. Though Lincoln himself remained curiously passive, his supporters arranged, for only the second time in American history, to have a party's state convention nominate a senatorial candidate. The procedure was so unprecedented that a Philadelphia editor called this "dangerous innovation" a "revolutionary effort to destroy the true intent and spirit of the constitution." Its purpose, however, was much less grand. The nomination was designed to give a clear signal to eastern Republicans like Greeley that Illinois Republicans would never unite behind Douglas.

When the Republican state convention assembled in the statehouse at Springfield on June 16, the delegates unanimously voted that Abraham Lincoln was "the first and only choice of the Republicans of Illinois for the United States Senate."

That evening Lincoln gave his acceptance speech. He had been thinking about it for several weeks, drafting sentences on stray pieces of paper and the backs of envelopes, storing them in his tall hat. By the evening of the convention every word was fixed in his tenacious memory:

If we could first know *where* we are, and *whither* we are tending, we could then better judge *what* to do, and *how* to do it.

We are now far into the *fifth* year, since a policy was initiated, with the *avowed* object, and *confident* promise, of putting an end to slavery agitation.

Under the operation of that policy, that agitation has not only *not ceased,* but has *constantly augmented.*

In *my* opinion, it *will* not cease, until a *crisis* shall have been reached, and passed.

A house divided against itself cannot stand.

I believe this government cannot endure, permanently half *slave* and half *free.*

I do not expect the Union to be *dissolved*—I do not expect the house to *fall*—but I *do* expect it will cease to be divided.

It will become *all* one thing, or *all* the other.

Attracting national attention, Lincoln's "house divided" speech sounded very radical. Advanced five months before William H. Seward offered his prediction of an "irrepressible conflict" between slavery and freedom, it was the most extreme statement made by any responsible leader of the Republican Party. Even Herndon, to whom Lincoln first read it, told his partner, "It is true, but is it wise or politic to say so?"

When Douglas learned the Republicans were nominating Lincoln, he recognized that he would be up against a formidable opponent. "I shall have my hands full," he told a newspaperman. "He is as honest as he is shrewd; and if I beat him, my victory will be hardly won." Douglas felt obliged to remain in Washington until he succeeded in defeating the Lecompton Constitution, but in July he returned home to Chicago and before a huge outdoor audience announced themes he would repeat in the coming campaign. He claimed credit for the defeat of Lecompton, which, he said, was a vindication of popular sovereignty. Referring to Lincoln, who sat on the balcony behind

him, as "a kind, amiable, and intelligent gentleman, a good citizen and an honorable opponent," Douglas insisted that Lincoln had "totally misapprehended the great principles upon which our government rests" and was advocating "boldly and clearly a war of sections, a war of the North against the South." Republicans who attacked the Dred Scott Decision, Douglas said, ignored the fact that "this government of ours is founded on the white basis. It was made by the white man, for the benefit of the white man, to be administered by white men." In advocating equal rights for the Negro, Republicans failed to understand that "any mixture or amalgamation with inferior races" could only lead to "degeneration, demoralization, and degradation."

The next night, from the same balcony of the same Chicago hotel, Lincoln replied to Douglas, denouncing his opponent for "quibbling about this race and that race and the other race being inferior" and urging a return to the spirit of the Declaration of Independence, "the electric cord that links the hearts of patriotic and liberty-loving men together."

The exchange in Chicago set a pattern for the next six weeks of the campaign. When Douglas set out on an extended tour of the state, Lincoln followed him. Douglas and his supporters were furious at Lincoln for poaching on the audiences that assembled to hear him. The *Illinois State Register* claimed that Lincoln did so because he could not attract his own crowds.

Lincoln changed his battle plan after Douglas began devoting more and more time on the stump to attacking Lyman Trumbull, who had accused him of a corrupt bargain in the repeal of the Missouri Compromise. Seeing that this personal quarrel would divert public attention from his own campaign, Lincoln proposed a series of debates with Douglas. The Senator was reluctant to agree. He had nothing to gain by giving public exposure to his lesser known rival. At the same time, he knew he could not refuse, lest he seem afraid of Lincoln. Grudgingly he consented to participate in seven debates. The first would take place at Ottawa, in the north-central part of the state, on August 21.

* * *

The seven formal debates between Lincoln and Douglas attracted great interest. As the Republican *New York Times* observed, Illinois in 1858 was "the most interesting political battle-ground in the Union." For the first time reporters were assigned to cover candidates. The state's most influential Republican and Democratic newspapers each sent shorthand experts to report every word.

Reporters noted the marked contrast in the way the candidates presented themselves. Douglas, a ruddy, stout man who came up only to Lincoln's shoulders, wished to appear a statesman of national reputation. Accompanied by his regal second wife, Adèle Cutts, he usually traveled by special train, splendidly fitted out for comfort. When he stood on the platform in his handsome new blue suit with silver buttons, he was unquestionably a great United States Senator reporting to his loyal constituents. Lincoln—exceptionally tall and painfully thin, with a melancholy physiognomy—cultivated a different image. When he went by train, he traveled in the regular passenger cars—a practice that afforded him endless opportunities for meeting voters and talking about their concerns. Except at the final debate, his elegantly dressed, aristocratic wife did not accompany him.

During the debates Lincoln took pains to wear his everyday clothes, usually appearing in what one observer described as "a rusty black frock-coat with sleeves that should have been longer" and black trousers that "permitted a very full view of his large feet." He was presenting himself to the voters not as one of the state's most prominent lawyers, but as a countryman, shrewd and incorruptible.

The opening debate at Ottawa attracted 10,000 people, who came on foot, by horseback or carriage, and even on Illinois River canal boats. Special trains brought visitors from Chicago and La Salle. Lincoln arrived about noon and was greeted by Ottawa mayor Joseph O. Glover. Seated in a carriage, Lincoln was escorted by a procession of military companies and brass bands to the public square and then to Mayor Glover's house.

At about the same time, a rival crowd went out to meet Douglas, who rode in a handsome carriage drawn by four spirited horses.

By one o'clock people began moving into Lafayette Square, where the speaking was to take place. There were no seats, and the audience had to remain standing for the entire three hours. All seven debates followed the same format: The opening speaker was allowed an hour for his presentation, his opponent had an hour and a half to reply, and the initial speaker then had a final half hour for rebuttal.

The ferocity of Douglas's opening statement apparently startled Lincoln. Announcing his major theme, the Senator bluntly charged that Lincoln and Lyman Trumbull had been conspiring since 1854 to subvert both the Democratic and the Whig parties in order to create "an Abolition party, under the name and disguise of a Republican party." As evidence of this intent he adduced a radical antislavery platform, which, he said, had been adopted in 1854 at the first Republican state convention in Springfield and which Lincoln had presumably endorsed. Like a prosecuting attorney pinning down a reluctant witness, he demanded to know whether Lincoln still stood on this platform. Did Lincoln now, as in 1854, favor the abolition of slavery in the District of Columbia? Was he pledged to end the interstate slave trade? Did he oppose the acquisition of additional territory unless slavery was prohibited in it? Lincoln, he charged, was in favor of suppressing self-government and imposing uniformity on the different states, a policy "never dreamed of by Washington, Madison, or the framers of this Government."

How to reply bewildered Lincoln. Rather stumblingly he declared that he had had nothing to do with the 1854 resolutions and that his name had been used in connection with them without his authority. He rushed through his speech and had difficulty striking the right tone. At times he resorted to worn clichés of humor, calling Douglas's misrepresentations of his views on race an example of that "specious and fantastic arrangement of words, by which a man can prove a horse-chestnut to be

a chestnut horse." He lapsed into legal language that must have been all but incomprehensible to his audience.

After Douglas's rebuttal, according to the partisan *Illinois State Register,* "nearly the entire crowd pressed around him, and the living mass, with shouts and hurrahs bore him, in their midst, to the hotel, the cheering and shouting being kept up incessantly." Lincoln's partisans were equally enthusiastic, but most of his advisers thought he had not been sufficiently aggressive.

At Freeport, a week later, he was clearly more in charge. Taking advantage of research done by Herndon and others, he dropped a bombshell. The abolition resolutions that Douglas had so elaborately read at Ottawa, which Lincoln allegedly endorsed, were not, as it turned out, ever adopted at any meeting Lincoln attended; they were passed by a convention in Kane County. Indignantly Lincoln announced that it was "most extraordinary" that Douglas "should so far forget all the suggestions of justice to an adversary, or of prudence to himself, as to venture upon the assertion [concerning these resolutions] which the slightest investigation would have shown him to be wholly false."

The revelation momentarily disconcerted Douglas, but he quickly recovered. Using diversionary tactics, he charged that Lincoln was avoiding either endorsing or repudiating these abolitionist resolutions by claiming that the platform had not been adopted "on the right 'spot.'" That gave him an opportunity to attack Lincoln's "spot" resolutions criticizing the Mexican War.

Nevertheless, everyone agreed that Lincoln made a stronger showing at Freeport than in the first debate. One admirer even announced that Lincoln's speeches were so telling that people were "now calculating his fitness and chances for a more elevated position."

Lincoln knew he was at a disadvantage in the third debate, at Jonesboro, in the extreme southern part of the state. Solidly Democratic and overwhelmingly negrophobic, rural Union

County had little use for the Republican Party. Fewer than 2,000 listeners attended the debate. Lincoln and Douglas rehashed issues they had raised in the previous debates and added little new information. Shrewdly Lincoln avoided the issue of equal rights for Negroes.

At Charleston, three days later, Lincoln was on more hospitable ground. Many in Coles County had known Thomas Lincoln and his family, and many were conservative old Whigs.

In his opening remarks Lincoln said he had recently been approached by an elderly man who wanted to know whether Lincoln was in favor of perfect equality between blacks and whites. "I am not, nor ever have been, in favor of bringing about in any way the social and political equality of the white and black races," he announced. "I am not nor ever have been in favor of making voters or jurors of negroes, nor of qualifying them to hold office, nor to intermarry with white people." This was a politically expedient thing to say in a state where the majority of inhabitants were of southern origin. But it also represented Lincoln's personal views. Opposed to slavery throughout his life, he had given little thought to the status of free African Americans. He was not personally hostile to blacks, but he did not know whether they could ever fit into a free society, and rather vaguely, he continued to think of colonization as the best solution to the American race problem.

Turning from the subject, Lincoln inexplicably devoted most of his Charleston opening speech to endorsing a charge, originally made by Trumbull, that Douglas, despite his opposition to the Lecompton Constitution, had really been part of a plot to impose slavery on Kansas. The story was intricate and confusing, involving secret proceedings in Senate committees, and Douglas had flatly announced that Trumbull's evidence for the alleged plot "was forged from beginning to end." Unwilling to see Trumbull calumniated, Lincoln now leaped to his defense with a tedious and unconvincing review of the charge.

After Charleston, the lowest point in his campaign, Lincoln made a splendid recovery in the final three debates. At Galesburg, an antislavery area heavily settled by Scandinavians,

the large audience was enthusiastic for the Republican candidate. Douglas, who was clearly tiring and was beginning to lose his voice, gave his standard speech, supporting the right of self-government and reasserting his view that the authors of the Declaration of Independence never intended to include the Negro.

In his reply Lincoln was in good voice and high spirits; he seemed to thrive on campaigning rather than being exhausted from it. Sensing that his audience was on his side, he appeared almost joyful as he rebutted Douglas's charges. He taunted Douglas on his repeated failure to repudiate the alleged Republican resolutions of 1854, which he had tried ever since the Ottawa debate to attach to Lincoln. In constantly reusing this "stale fraud," Douglas was like "the fisherman's wife, whose drowned husband was brought home with his body full of eels." Said she "when she was asked, 'What was to be done with him?' 'Take the eels out and set him again.'" Then, becoming serious, he again charged that Douglas was part of a plan to make slavery national. "He is blowing out the moral lights around us," Lincoln said, borrowing a phrase from Henry Clay.

At Quincy, a week later, each candidate went over the familiar arguments. Lincoln, near the end of his opening speech, stated what he believed was the fundamental issue of the campaign: "the difference between the men who think slavery a wrong and those who do not think it wrong."

Douglas, in reply, defended his record and charged that Lincoln held "one set of principles in the Abolition counties, and a different and contradictory set in the other counties." Earnestly he besought his listeners to return to the basic principle of self-government. If they recognized, as the fathers of the nation had always recognized, that "this Republic can exist forever divided into free and slave States," Americans could get on with their "great mission" of "filling up our prairies, clearing wildernesses and building cities, towns, railroads and other internal improvements."

Lincoln, in his rebuttal, seized upon Douglas's admission that his "system of policy in regard to the institution of slavery con-

templates that it shall last forever." That, he said, proved what he had been arguing all along about Douglas.

On the day after the Quincy debate, both Lincoln and Douglas got aboard the *City of Louisiana* and sailed down the Mississippi River to Alton, for the final encounter of the campaign. Looking haggard with fatigue, Douglas opened the debate on October 15 in a voice so hoarse that he could scarcely be heard. After reviewing the standard arguments over which he and Lincoln had differed since the beginning of the campaign, he made the peculiar decision to devote most of his speech to a detailed defense of his course on Lecompton.

In his reply Lincoln once more defined what he perceived to be "the real issue in this controversy" as a conflict "on the part of one class that looks upon the institution of slavery *as a wrong,* and of another class that *does not* look upon it as wrong." Rising to the oratorical high point in the entire series of debates, he told the Alton audience: "That is the issue that will continue in this country when these poor tongues of Judge Douglas and myself shall be silent. It is the eternal struggle between these two principles—right and wrong. They are the two principles that have stood face to face from the beginning of time; and will ever continue to struggle. The one is the common right of humanity and the other the divine right of kings."

With a brief rejoinder by Douglas, the debates were ended. The decision now lay with the voters.

It was hard to predict what that decision would be. Even an extremely conscientious citizen who made a point of attending all seven debates might find it hard to make up his mind. Well-informed Illinois voters understood that what was at stake was not just the choice between two candidates or political parties; it was a choice between two fundamentally opposed views of the meaning of the American experience. One way to formulate that difference was to see Douglas as the advocate of majority rule and Lincoln as the defender of minority rights. In Douglas's view there were virtually no limits on what the majority of the people of a state or a territory could do—including, if they so

chose, holding black-skinned inhabitants in slavery. While Lincoln also valued self-government, he felt passionately that no majority should have the power to limit the most fundamental rights of a minority to life, liberty, and the pursuit of happiness.

Though November 2 was cold, wet, and raw, voters turned out in large numbers—more than in the 1856 presidential election. Since the name of neither Lincoln nor Douglas appeared on any ballot, there was no way of measuring the impact of their campaigning. The most obvious lesson of the 1858 election was that voting patterns in Illinois had become very stable, with the northern counties firmly Republican and the southern half of the state stalwartly Democratic. Though Republicans won in the popular vote (and elected their candidates for state treasurer and superintendent of education), they did not gain control of the state legislature, which would choose the next Senator. In the legislative ballot on January 5, 1859, Douglas received 54 votes to Lincoln's 46 and was thus reelected to the United States Senate for another six years.

Lincoln was bitterly disappointed. With one more defeat added to his record, he had received yet another lesson in how little his fate was determined by his personal exertions. He was sure his political career was ended. Confident only of the unquestioning loyalty of his partner, he remarked with some bitterness, "I expect everyone to desert me except Billy."

But as a leader, he recognized his duty to cheer up his associates, who were also suffering from his defeat. "The fight must go on," he assured one friend. "The cause of civil liberty must not be surrendered at the end of *one,* or even, one *hundred* defeats."

EIGHT

The Taste Is *in My Mouth*

"This year I must devote to my private business," Lincoln vowed in 1859, but it was politics that really interested him now. As the leading Republican in Illinois, he felt a great responsibility in planning for his party's victory in the upcoming presidential election of 1860.

The idea that he himself ought to be nominated for high office emerged right after the 1858 election, when some of his followers, bitter over his defeat, began to ask, "Cant we make him President or vice?" Favorable mention of his possible candidacy appeared in the New York *Herald* as well as various Illinois papers.

Lincoln did not think himself presidential timber. During the 1858 campaign against Douglas he confided to journalist Henry Villard that he doubted his ability to be a Senator, though his wife was confident that he would one day become President. "Just think," he exclaimed, "of such a sucker as me as President."

He was not being coy, but realistic. To all outward appearances he was less prepared to be President of the United States than any other man who had run for that office. Without family tradition or wealth, he had received only the briefest of formal schooling. Now fifty years old, he had no administrative experience; he had never been governor of his state or even mayor of Springfield. A profound student of the Constitution and of the writings of the founding fathers, he had limited acquaintance with the government they had established. He had

served only a single term in the House of Representatives and for the past ten years had held no public office. Though he was one of the founders of the Republican Party, he had no close friends in the populous eastern states, whose vote would be crucial in the election. His debates with Douglas had brought him national attention, but he had twice lost the senatorial election, in 1855 and 1859.

Despite these handicaps, Lincoln did think about the presidency, and his chances for securing the Republican nomination seemed better than average. The party had several strong candidates, but all had flaws. The leading name, William H. Seward, the Senator and former governor of New York, was handicapped by an undeserved reputation for extremism. Pennsylvania Republicans mostly favored Senator Simon Cameron, but he had few followers outside that state. Salmon P. Chase, the Republican governor of Ohio, earnestly sought the nomination but lacked personal magnetism. Edward Bates of Missouri, a conservative Free-Soil Whig, now sixty-six years old, was not even a member of the Republican Party.

A strong indication of Lincoln's growing interest in a presidential race was the alacrity with which he accepted an invitation from New York to lecture at Henry Ward Beecher's Plymouth Church in Brooklyn in February 1860. Knowing that he would appear before a sophisticated eastern audience, he prepared more carefully than for any other speech of his life. He also ordered a brand-new black suit.

By the time he arrived in the East, sponsorship of the address had been taken over by the Young Men's Central Republican Union, a body that included sixty-five-year-old William Cullen Bryant, forty-nine-year-old Horace Greeley, and other such youths who were organizing a stop-Seward movement. After they shifted the lecture to the Cooper Union in Manhattan, Lincoln spent his first day in New York revising his address to make it more suitable for a general audience than for a religious congregation.

On Monday, February 27, escorted by several of the Young Republicans, Lincoln caught a glimpse of Broadway and had his

photograph taken by Mathew B. Brady. That night, after a warm introduction by Bryant, Lincoln appeared before a capacity audience at the Cooper Union. Many listeners expected "something weird, rough, and uncultivated," George Haven Putnam remembered, but Lincoln's speech quickly erased the impression of a crude frontiersman. It was a masterful exploration of the political paths open to the nation. Lincoln seized the opportunity to portray the Republicans as a party of moderates who were trying to preserve the legacy of the founding fathers against the assaults of proslavery radicals. Republicans, he said, should fearlessly persist in excluding slavery from the national territories, confining it to the states where it already existed. In his spine-tingling peroration he concluded, "Let us have faith that right makes might, and in that faith, let us, to the end, dare to do our duty as we understand it."

It was a superb performance, and when Lincoln closed, the crowd cheered and stood, waving handkerchiefs and hats. Noah Brooks, then working for the New York *Tribune,* exclaimed, "He's the greatest man since St. Paul." A student at the Harvard Law School, trained to master his emotions, told his father, "It was the best speech I ever heard." The day after, four New York newspapers published the address in full, and it was later reissued as a Republican tract. It was a superb political move for an unannounced presidential aspirant.

The next day Lincoln went on to New England, ostensibly to visit Robert, who had enrolled in Phillips Exeter Academy the previous September. Of course, Lincoln was glad to see his son, but during his four days with Robert he also made campaign addresses at Concord, Manchester, Dover, and Exeter. On the last of these occasions many of the boys from the academy turned out. The students were astonished when Lincoln came into the hall. They observed his rumpled hair, his necktie turned awry, and his long legs, which seemed to fit neither under nor around his chair. "Isn't it too bad Bob's father is so homely?" they whispered to each other. But after Lincoln began speaking, they no longer pitied Bob but felt proud to know his father.

The success of Lincoln's eastern trip edged him a step closer to becoming an avowed candidate for the Republican presidential nomination. Still, he was hesitant. On his return to Springfield he conferred with prominent Illinois Republicans, who pressed him to run. Only after a night of reflection—and doubtless of conferences with Mary, who was even more ambitious than he was—did he authorize the group to work quietly for his nomination. "I will be entirely frank," he wrote to Trumbull in April. "The taste is in my mouth a little."

Lincoln could not openly campaign for the nomination, because tradition dictated that the office should seek the man. He relied on others to serve as his agents. While they were hard at work, Lincoln had to appear to be above the fray.

On May 9–10, a week before the national convention, Illinois Republicans met at Decatur. To house the gathering, citizens of the town constructed what they called a wigwam, a barnlike wooden structure capable of holding the hundreds of delegates and spectators. For many who attended, the principal business of this convention was the choice of a candidate for governor; eventually they gave the nomination to Richard Yates. While it was generally recognized that the state convention would give the presidential endorsement to Lincoln as a favorite son, most thought that the national convention would choose either Edward Bates or William Seward; a first-ballot vote for Lincoln would simply be a compliment.

But a few of Lincoln's supporters were determined to make the Decatur convention a launching pad for a serious presidential campaign. They felt that what had been lacking so far was a catchy slogan. Lincoln was already widely known as Old Abe or Honest Abe, but Richard J. Oglesby, a young Decatur politician, felt Lincoln needed a more dynamic image. Consulting with the elderly John Hanks, a first cousin of Lincoln's mother, he located a rail fence that Hanks and Lincoln put up in 1830. On the first day of the convention Oglesby introduced Hanks, who, with an assistant, marched down the aisle carrying two rails labeled:

ABRAHAM LINCOLN
The Rail Candidate
FOR PRESIDENT IN 1860.
Two rails from a lot of 3,000 made in 1830 by Thos. Hanks
and
Abe Lincoln—whose father was the first pioneer
of Macon County.

The label was not entirely accurate, for Lincoln's father had not been the first pioneer in the county, and it was John, rather than Thomas, Hanks who had helped split the rails. But nobody cared. As the rails, decorated with flags and streamers, were carried to the front of the wigwam, the crowd burst into applause. Lincoln blushed and told the delegates that he had indeed split rails thirty years ago near Decatur. Whether these rails were taken from that fence, he could not vouch, but, he said in his disarming way, "he had mauled many and many better ones since he had grown to manhood."

The cheers that greeted Lincoln's remarks suggest that even his managers had underestimated his popularity. Now labeled the Rail Splitter, he could be packaged not merely as a folksy, storytelling campaigner but also as the embodiment of the self-made man and the spokesman of the great West.

After the convention adjourned for the day, Lincoln met with Chicagoan Norman Judd, Judge David Davis, and a few other friends in a grove near the wigwam, where, lying on the grass, they studied the list of delegates to be sent to Chicago. Lincoln personally selected the four at-large delegates. Judd, as a member of the Republican National Committee and as a representative of Chicago interests, was one. Recognizing the importance of the German vote, Lincoln named Gustave Koerner, a Bellville lawyer, for the second slot. For the third he picked Orville Browning, the conservative Quincy lawyer who had great influence among the former Know-Nothings. The final member of the team was his most trusted adviser, David Davis.

Lincoln and his friends had no control over the selection of the eighteen other delegates, but they suspected that eight of

them were Seward supporters. To prevent them from defecting, Lincoln's advisers agreed to ram through the convention the next day a resolution that "Abraham Lincoln is the choice of the Republican party of Illinois for the Presidency, and the delegates from this State are instructed to use all honorable means to secure his nomination by the Chicago Convention, and to vote as a unit for him." At the Chicago convention, Illinois would be unanimous for Lincoln.

Lincoln was tempted to attend the Chicago convention. After he returned from Decatur, he told his friend and adviser Leonard Swett that "he was almost too much of a candidate to go, and not quite enough to stay at home." On reflection, he decided to remain in Springfield, so he was not directly involved in the tumultuous proceedings of the second Republican National Convention that assembled on May 16–18 in the huge wigwam just completed in Chicago.

The Illinois delegation found Seward's position stronger than they had anticipated because the Democratic National Convention, deadlocked between Douglas's backers and the southern states' rights advocates, had adjourned without making a nomination. Already assured of the support of states in the upper North, Seward might win if the Democrats continued to deny the nomination to Douglas, their strongest candidate in the North. But realistic Republicans anticipated that when the Democratic National Convention reconvened in June, Douglas would be the nominee, with formidable strength in the Ohio Valley region. Seward's rivals were further encouraged when the new National Union Party, more or less a reincarnation of the Whig and American parties, on May 10 nominated John Bell of Tennessee. The shrewdest Republicans were looking for a candidate who, in addition to carrying the northern states, could win in Pennsylvania, Indiana, and Illinois. Seward, for all his strength elsewhere, was weak in these states. Chase had the support of only a part of his own Ohio delegation. Cameron had no following outside Pennsylvania, and Bates probably could not carry even his own state of Missouri.

That left Lincoln, who appeared to be exactly what the Republican Party needed: He was unequivocally opposed to the expansion of slavery; he had for years favored economic development and the protective tariff so dear to Pennsylvanians; he had strong emotional appeal to former Whigs; and he had managed to oppose the Know-Nothing Party without indulging in moral condemnation of the nativists. If the Republican delegates at Chicago followed the dictates of political reason, he would be their choice.

But of course, Lincoln knew that emotion plays as large a role in politics as reason, and that is why he wanted his team of managers in place at Chicago, ready to squelch rumors, soothe ruffled egos, and flatter doubting delegates. From his rooms at the Tremont Hotel, David Davis took charge of the operation. His primary objective was to secure at least 100 votes for Lincoln on the first ballot, with other votes in reserve so that Lincoln would appear to gain strength on a second ballot. Davis sent out members of his team to talk with delegations where they might have influence. Swett, for instance, visited the delegation from Maine, the state of his birth. Browning, a former Bates man, proved invaluable in talking with delegations that teetered between Bates and Lincoln. Judd, in charge of seating arrangements, took pains to put the New York delegation at one end of the hall and the Pennsylvania delegation at the other; separated by pro-Lincoln supporters, they could not influence each other during the balloting.

Though Davis's team worked incessantly to woo uncommitted delegates, they did not find it necessary to resort to bribery. Subsequent stories about the numerous bargains Davis and his aides made in Chicago were mostly based on speculation by politicians who were surprised by Lincoln's strong showing.

There was some credibility, however, to the report that Davis made a bargain with the Pennsylvania delegation. Judge Joseph Casey, Simon Cameron's representative in Chicago, demanded a pledge that Cameron would become Lincoln's Secretary of the Treasury in return for Pennsylvania's votes on the second ballot. Davis responded vaguely that Pennsylvania would surely have a

place in the Cabinet and that he would personally recommend Cameron for the position. Casey thought he had received a pledge. But Davis, believing he had made only a personal, conditional promise, flatly denied any bargain: "Mr. Lincoln is committed to no one on earth in relation to office—He has promised nothing."

Up early on Friday, May 18, the day nominations were to be made, Lincoln went quietly about his business. He passed some time playing fives—a variety of handball—with some men in a vacant lot next to the *Illinois State Journal* office. When Lincoln was back at his law office, Edward L. Baker of the *Journal* came in with a telegram announcing that Lincoln's name had been placed in nomination and received with great enthusiasm. Shortly afterward a new telegram announced the result of the first ballot: Seward 173½, Lincoln 102, Bates 48, Cameron 50½, Chase 49; 233 were needed for a choice. Giving no indication of his feelings, Lincoln went to the telegraph office, where a report on the second ballot was just coming in: Seward now had 184½ votes; Lincoln, largely as a result of a switch in the Pennsylvania vote, rose to 181; all other candidates lost strength.

Lincoln awaited the results of the third ballot in the *Journal* office. As he had anticipated, this was the last ballot. Seward retained most of his strength, but nearly all the other delegates flocked to Lincoln, with a total of 231½ votes—1½ votes short of a majority. At this point 4 Ohio votes switched from Chase to Lincoln, and other delegations promptly followed, giving him a total of 364, out of a possible 466, votes. The Seward men then moved to make the nomination unanimous.

Emerging from the *Journal* office, Lincoln said jokingly to the ballplayers who broke off their game to congratulate him, "Gentlemen, you had better come up and shake my hand while you can—honors elevate some men." Then he headed for home.

When the news of his nomination became official, along with a report that the convention had balanced the ticket by naming a former Democrat, Hannibal Hamlin of Maine, for Vice

President, Lincoln felt under some pressure to go to Chicago, where he could bask in his triumph and soothe the disgruntled Seward element. But his advisers unanimously urged him to stay in Springfield. "Dont come here for God's sake," Davis wired succinctly, adding, "Write no letters and make no promises till you see me."

That was the policy Lincoln followed. On May 19 a delegation from the convention came to his house to notify him of his nomination. Initially the interview was very stiff. Only a few of the delegates had ever seen their candidate before, and they were startled by his appearance. Lincoln was tense because he and Mary had just quarreled over whether liquor should be served to the visitors—as it certainly would have been at her father's mansion in Kentucky. But Lincoln knew the strength of the temperance movement and insisted on offering only ice water. After the notice of his nomination was read, he responded cautiously that he needed more time to fully consider the platform—and in fact did not formally accept until four days later. To keep the meeting from being a fiasco, Lincoln resorted to a gambit he was frequently to employ in the White House. Singling out the lanky Pennsylvania delegate, William D. Kelley, he asked how tall he was.

"Six feet three," was the answer.

"I beat you," chuckled Lincoln. "I am six feet four without my high-heeled boots."

"Pennsylvania bows to Illinois," Kelley said. "I am glad that we have found a candidate for the Presidency whom we can look up to."

Now that Lincoln was a celebrity, everybody wanted to see him, and the number of visitors became too great to be handled at the house on Eighth and Jackson streets, especially after Willie fell ill with scarlet fever. Gladly Lincoln accepted the invitation of Governor John Wood to use his office in the state capitol. John G. Nicolay, a young German American newspaperman, served as his secretary.

Much of Lincoln's time that summer was occupied in acknowledging the hundreds of letters of congratulations he re-

ceived. There were so many applications for autographs that he prepared a standard reply: "You request an autograph, and here it is. Yours truly A. Lincoln." He also attempted to satisfy the enormous public curiosity about a candidate whose career was not widely known outside his own state. Photographers flocked to Springfield to take his picture. People clamored for facts about his life. Hardly was the Chicago convention over before campaign biographies of Lincoln and Hamlin were announced.

Forbidden by the unanimous advice of his friends from taking any public role in the campaign, Lincoln followed events closely. After June, when the Democratic Party split, with the northern wing nominating Douglas and the southerners nominating John C. Breckinridge, Lincoln had little doubt that the Republicans would win the presidential election if the discordant elements that composed the party could work together. He spent much time attempting to conciliate the rival factions in Pennsylvania and New York.

Occasionally Lincoln thought of taking a more active role in the campaign, imitating Douglas, who was flouting precedent and making stump speeches in behalf of his candidacy. But his friends convinced him that such a trip would be viewed as "evidence of Republican alarm," and he dropped the idea.

Necessarily, then, Lincoln was largely isolated from the hurly-burly of the campaign. His one public appearance was a giant rally in Springfield in August, where he expected simply to see the people and be seen. Yet so enthusiastic was his reception that when he got ready to leave, the crowd at the fairground surrounded his carriage and came near to smothering him.

On Election Day, accompanied by Herndon, Lincoln went to the polls from his office at the state capitol. Republicans shouted as he approached, and even Democrats, proud of their local celebrity, respectfully raised their hats.

That evening Lincoln joined fellow Republicans who crowded the capitol to hear the returns relayed from the telegraph office. Illinois went Republican, then Indiana, and the ticket did well in the other western states. But there was still no news from the critical eastern states, and Lincoln and a few

others walked over to the telegraph office. Not until after ten o'clock did reports come in of Republican victories in Pennsylvania. While they were waiting for the news from New York, the party was invited to Watson's Saloon, where Republican ladies were serving supper. When Lincoln entered, the women greeted him: "How do you do, Mr. President!" After eating, Lincoln returned to the telegraph office and stayed until about two, when the news that his party had carried New York made his election certain. "I went home, but not to get much sleep," he remembered, "for I then felt as I never had before, the responsibility that was upon me."

When the final tally was made, the Republican ticket received 1,866,452 votes to 1,376,957 for Douglas, 849,781 for Breckinridge, and 588,879 for Bell. With less than 40 percent of the popular vote, the Lincoln and Hamlin ticket won 180 votes in the electoral college to 72 for Breckinridge, 39 for Bell, and 12 for Douglas. The Republican ticket carried all but one of the free states. Despite his large popular vote, Douglas won only the Missouri and part of the New Jersey electoral vote. It was ominous that Lincoln and Hamlin received not a single vote in ten of the southern states.

NINE

An Accidental Instrument

Formidable problems faced the President-elect. At the news of his election, disunion erupted in the South. On November 10 the South Carolina legislature authorized the election of a state convention for December 6 to consider future relations between the state and the Union. Eight days later Georgia followed suit. Within a month every state of the lower South had taken steps toward secession. Neither President James Buchanan nor the lame-duck Congress had any policy to deal with this crisis. All eyes turned to Springfield, where an inexperienced leader groped, on the basis of inadequate information, to formulate a policy for his new administration.

In the months after the election, the President-elect went steadily about his business in Springfield. Working with John Nicolay, his efficient private secretary, he dealt with several baskets of mail that arrived each day. Presently the burden of correspondence was so great that Nicolay recruited young John Hay, who was studying law in his uncle's office in Springfield, to help.

At ten o'clock Lincoln would open his office in the state capitol to visitors. His callers were of every sort: politicians offering advice, journalists looking for stories, women who simply asked to shake his hand, old friends from New Salem days.

Visitors did not know what to make of this President-elect. He surprised even his old friends by growing a beard. During the campaign eleven-year-old Grace Bedell of Westfield, New York, had written that she'd get her brothers to vote for Lincoln if he let his beard grow. "You would look a great deal better for your face is so thin," she suggested. "All the ladies like whiskers and they would tease their husband's to vote for you and then you would be President." Amused, Lincoln was sporting a half beard by the end of November. No one knew what to make of the change. Perhaps it suggested he was hiding his face because he knew he was not ready to be President. Or maybe it demonstrated the supreme self-confidence of a man who was willing to risk ridicule and inevitable puns like Old Abe is . . . puttin' on (h)airs.

Lincoln's manner as well as his appearance startled visitors. Though he was often called Old Abe, he was, up to this point, one of the youngest Presidents of the United States. Only fifty-one, he was a generation younger than his predecessor, James Buchanan. Vigorous and athletic, he bounded up stairs two or three steps at a time. His energy seemed inexhaustible.

So did his conversation. Visitors to his office often felt stunned by the sheer volume of his words. He showered them with ideas and anecdotes. Most stories he recounted simply because he thought they were funny. When telling these tales, his face lit up, and at the punch line his high-pitched laughter rang through the capitol. But he also knew how to use storytelling to deflect criticism or to avoid answering a difficult question. When former governor Charles S. Morehead of Kentucky urged him to make concessions to the secessionists, Lincoln was reminded of Aesop's fable about the lion in love with a beautiful woman, whose parents were opposed to her marrying the beast but were afraid of his long claws and sharp teeth. Claiming their daughter was delicate, they asked the lion to have his claws cut off and his tusks drawn lest he injure her. Desperately in love, the lion consented, and as soon as his claws were cut off and his tusks removed, the parents knocked him on the head with clubs. A disgruntled Morehead remarked "that it was

an exceedingly interesting anecdote, and very *apropos*, but not altogether a satisfactory answer." Lincoln used this technique throughout his presidency, to the bafflement of those who had no sense of humor and the rage of those who failed to get a straight answer from him.

In the three months after his election Lincoln issued no public statements. Following the advice of most leaders of his party, he resisted the growing pressure to reassure the South. Any indication that he was frightened by southern bluster would only throw his supporters in the North into disarray.

But Lincoln's silence also reflected his deeply held conviction that Unionists were in a large majority throughout the South and that, given time for tempers to cool, they would be able to defeat the secessionist conspirators. He did not believe that any sizable number of rational citizens could contemplate disrupting the best government the world had ever seen.

On the night after the election, oppressed by the responsibility that would soon be his, Lincoln began casting about in his mind for advisers who could best help him. He jotted down eight names on a card:

Lincoln	Judd
Seward	Chase
Bates	M. Blair
Dayton	Welles

The list suggested the direction of his thinking. If his administration was to be successful, he needed the support of Seward, Chase, and Bates—his principal rivals for the nomination. The list also indicated Lincoln's understanding that the Republican Party was not a unified organization, but a collection of rival interest groups. The most important of these were the antislavery former Whigs and Free-Soil Democrats. The four names in the right-hand column had Democratic antecedents; the three prospective Cabinet members in the left were former Whigs. Later, when Thurlow Weed observed that such an arrangement

gave a preponderance to the Democrats, Lincoln replied, "You seem to forget that *I* expect to be there; and counting me as one, you see how nicely the cabinet would be balanced and ballasted."

Lincoln's initial list was balanced geographically, too. It gave one Cabinet member (Gideon Welles of Connecticut) to New England, two (William H. Seward and William L. Dayton) to the northeastern states of New York and New Jersey, two (Salmon P. Chase and Norman B. Judd) to the Northwest, and two (Edward Bates and Montgomery Blair) to the border slave states.

Two days after the election Lincoln asked Hannibal Hamlin, whom he had never met face to face, to meet him in Chicago. There, on November 21, the future President and the future Vice President began a three-day conference. The main item on the agenda was the selection of the Cabinet. There was ready agreement that the office of Secretary of State must be offered to Seward, in recognition of his services to the Republican Party and his position in the Senate.

Before Seward accepted, he and Weed had pressed Lincoln to deviate from his original list and name one or more Cabinet members from the South. This move would assure the slave states that Lincoln was going to head a truly national administration. Montgomery Blair, who was on Lincoln's list, was not from the Deep South, but he did live in the slave state of Maryland, where he had campaigned vigorously for the Republican ticket. Blair had considerable support among former Democrats like Lyman Trumbull and Vice President–elect Hamlin. He was picked as Postmaster General.

Lincoln did not approach Salmon P. Chase until after he received Seward's acceptance. The two men were such bitter rivals that an invitation to Chase might have caused Seward to decline. But now Lincoln felt free to invite Chase to Springfield. He had never seen the Ohioan, who had just ended his second term as governor and was about to take a place in the Senate. But when they met, Lincoln was greatly impressed. He said later that Chase "is about one hundred and fifty to any other man's hundred." But Lincoln decided not to make the appointment until after he reached Washington.

At Chicago, Lincoln had promised that his Vice President could name the Cabinet member from New England. It was a generous gesture, but Lincoln was pretty sure Hamlin's choice would be his own: Gideon Welles, a former Democrat and editor of the influential Hartford *Evening Press*. Lincoln and Hamlin settled on him for Secretary of the Navy.

On December 15 Edward Bates came to see the President-elect. Recognizing that the vast ego of the sixty-seven-year-old Missouri lawyer might lead him to expect the first place in the Cabinet, Lincoln explained why it was politically necessary to offer Seward the State Department. But he could offer the post of Attorney General. Suitably massaged, Bates accepted.

Lincoln's other Cabinet selections were more difficult. Norman Judd, who was on his original list, had the backing of the former Democrats in the Illinois Republican Party but was strongly opposed by David Davis, Leonard Swett, and other former Whigs. Mary Lincoln also violently disliked him. To further complicate matters, Lincoln had to weigh Illinois's interests in a Cabinet position against the rival claims of Indiana, which had done so much to make his nomination in Chicago possible. Indiana's Caleb B. Smith earnestly sought a Cabinet seat. But Lincoln also had to consider the claim of Smith's home state rival, Schuyler Colfax. It was no wonder that Lincoln, as he told Thurlow Weed, found that "that making of a cabinet . . . was by no means as easy as he had supposed." Eventually he decided on Smith.

Indiana's problems were simple compared to those of Pennsylvania, where Republicans were bitterly divided. One faction was loyal to Senator Cameron; another followed Governor-elect Andrew G. Curtin and A. K. McClure, chairman of the Pennsylvania Republican state committee. Certain the rivals could never agree on a candidate for the Cabinet, Lincoln thought that naming Dayton of New Jersey would adequately represent Pennsylvania's interests.

That plan infuriated Cameron's supporters, who descended on Springfield two days after the election. They found Lincoln

hospitable, affable—and baffling. They learned nothing about Cabinet prospects but heard story after story of frontier days.

Back home, they organized a letter-writing campaign in Cameron's behalf. Soon Lincoln's desk was covered with impressive testimonials for the Senator. But a chorus of opposition also arose, most of it stemming from Cameron's checkered record. Using bribery and intimidation, much as Thurlow Weed did in New York, Cameron became the boss of the Pennsylvania Republican machine. Principled Republicans thought his appointment to the Cabinet would be disgraceful.

To end the stalemate, Lincoln let it be known that he would appoint no Pennsylvanian to the Cabinet until he reached Washington. Then, on his trip east, he mentioned in passing that it might be good to retain one or two members of Buchanan's Cabinet, including perhaps the Secretary of the Treasury. At this point, business interests in Pennsylvania faced the prospect of having no voice in the Lincoln administration, and rival political factions concluded it would be better to have Cameron with all his faults than to have no representation at all.

In this disorderly way Lincoln picked his advisers. The selection process ensured that the Cabinet would never be harmonious or loyal.

During the winter of 1860–61, while Lincoln was constructing his Cabinet, the country was falling to pieces. On December 20 South Carolina's secessionist convention declared that the state was no longer a part of the Union. By the end of January the states of Florida, Mississippi, Alabama, Georgia, and Louisiana all followed, and secession was under way in Texas. In February representatives of six states of the Deep South met at Montgomery, Alabama, and formed the new Confederate States of America.

As the southern states seceded, they seized federal arsenals and forts within their borders. Apart from two minor installations in Florida, only Fort Pickens at Pensacola and the fortifications at Charleston, South Carolina, remained in the control

of the United States government. Late in December, Major Robert Anderson, in command at Fort Moultrie on the shoreline at Charleston, transferred his garrison to the more defensible Fort Sumter, erected on a rock shoal in the harbor. On January 9, when the *Star of the West,* bearing supplies and additional troops, tried to reinforce the Sumter garrison, the South Carolinians fired on it and forced it to retreat.

In Washington, government officials could not agree on how to deal with the crisis. The President, along with many other conservatives, favored calling a national convention to amend the Constitution so as to redress southern grievances. The House of Representatives created the Committee of Thirty-three, with one Congressman from each state. The Senate set up a similar Committee of Thirteen, which was unable to agree on a program, though John J. Crittenden, one of its members, came up with a broad compromise proposal. But the chances for a compromise in 1860–61 were never great. The Crittenden Compromise, the most promising of the suggested agreements, was opposed by influential southerners and northerners alike. Only intervention by the President-elect could have changed the attitude of Republicans and, in so doing, could conceivably have induced the southerners to reconsider their position. But Lincoln considered these compromise schemes to be bribes to the secessionists. Grimly he told a visitor, "I will suffer death before I will consent to any concession or compromise which looks like buying the privilege to take possession of this government to which we have a constitutional right." Lincoln's commitment to maintaining the Union was absolute.

Looking forward to her new role in the White House, Mary Lincoln went to New York in January, accompanied by her brother-in-law C. M. Smith. Robert joined her there. Aware that in March her husband would begin drawing a salary of $25,000—at least five times as much as his average annual income in Springfield, she set about ordering a wardrobe that would show Washington society that she was no frontier woman. Eagerly merchants extended credit, and she began run-

ning up debts that she concealed from her husband. She saw nothing wrong in accepting presents from those who sought favors from the Lincoln administration. She was, after all, now a very important person who deserved special treatment.

Five days later the President-elect set out on a journey of his own to see his stepmother in Coles County. He had to use a passenger train, a freight train, and a buggy to complete the difficult trip. He found the seventy-three-year-old Sarah Bush Johnston Lincoln living with her daughter in Farmington, near Goosenest Prairie, and had a long, emotional visit with her. Afterward he visited his father's grave and said he intended to have a suitable tombstone erected, but he never did so. When he said good-bye, his stepmother was in tears. "I did not want Abe to run for Presdt.," she recalled years later, "did not want him, elected—was afraid somehow or other . . . that Something would happen [to] him . . . and that I should see him no more."

On February 6 the Lincolns said good-bye to their friends in Springfield at a reception described in the New York papers as "the most brilliant affair of the kind witnessed here in many years." Standing side by side in their first-floor parlor from seven p.m. until midnight, they welcomed 700 guests. "Mrs. Lincoln's splendid toilette," it was remarked, "gave satisfactory evidence of extensive purchases during her late visit to New York."

Before leaving Springfield, Lincoln called on Herndon, whom he had not seen frequently during the months after the election. Exhausted, the President-elect told Herndon, "I am sick of office-holding already." After a time he gathered up some books and papers and talked for a moment more before going downstairs. Looking back, he glanced at the law shingle of Lincoln & Herndon. "Let it hang there undisturbed," he said. "Give our clients to understand that the election of a President makes no change in the firm of Lincoln and Herndon. If I live I'm coming back some time, and then we'll go right on practising law as if nothing had ever happened."

February 11 was cold and rainy, but a crowd of Springfield residents gathered at the Great Western Railroad depot to see

Lincoln off. At 7:55 a.m. he climbed the steps to his private car and paused to say a final farewell to his neighbors:

> My friends—No one, not in my situation, can appreciate my feeling of sadness at this parting. To this place, and the kindness of these people, I owe every thing. Here I have lived a quarter of a century, and have passed from a young to an old man. Here my children have been born, and one is buried. I now leave, not knowing when, or whether ever, I may return, with a task before me greater than that which rested upon Washington. Without the assistance of that Divine Being, who ever attended him, I cannot succeed. With that assistance I cannot fail. . . . Let us confidently hope that all will yet be well. To His care commending you, as I hope in your prayers you will commend me, I bid you an affectionate farewell.

For the next twelve days the presidential train moved across the country. Along the route people gathered to cheer the first American President born west of the Appalachians. At little Ohio towns like Milford and Xenia, where the train stopped only long enough for the President-elect to appear on the rear platform and bow, large crowds assembled, often with bands playing and artillery booming. In the larger cities the throngs were immense. Playing the crowds with consummate skill, Lincoln complimented everybody and everything.

The journey had the larger purpose of encouraging support for the Union and fostering loyalty among the northern people. In his speeches Lincoln repeatedly emphasized that the tumultuous welcome he received was not a personal tribute. He had been elected President, he said with excessive modesty, "by a mere accident, and not through any merit of mine"; he was "a mere instrument, an accidental instrument, perhaps I should say," of the great cause of Union.

As the presidential party moved east, news from the South became more ominous. Jefferson Davis was inaugurated provi-

The Kentucky cabin where Abraham Lincoln was born in 1809.

Lincoln in front of his residence in Springfield, Illinois.

Lincoln in court defending Duff Armstrong.

The Capitol in Washington, D.C., circa 1845.

The slave market in Richmond, Virginia.

RAFFLE

DARK BAY HORSE, "STAR,"

MULATTO GIRL, "SARAH,"

Will be Raffled for

CHANCES AT ONE DOLLAR EACH

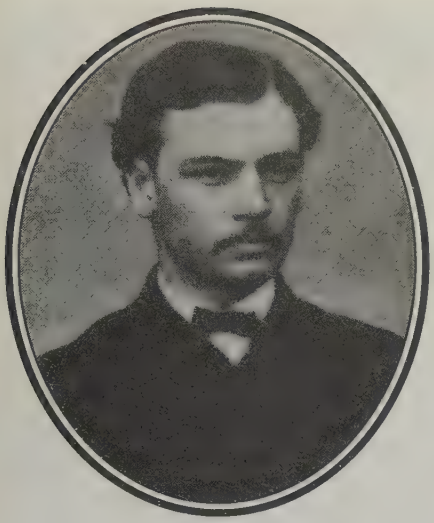
Auction advertisement. The wares offered are a horse and a human.

Overseer and slaves laboring in the fields. An 1840 woodcut.

Lincoln and Douglas (seated, to Lincoln's right) debate for the U.S. Senate, 1858.

Abraham Lincoln's stepmother, Sarah Bush Lincoln.

First Lady Mary Lincoln, photographed in a ballgown.



Robert Todd Lincoln,
the president's eldest son.

William "Willie" Wallace Lincoln. The
second son would only live to age 12.

The president with his third son, Thomas "Tad."

An African American regiment fights for freedom on the side of the North.

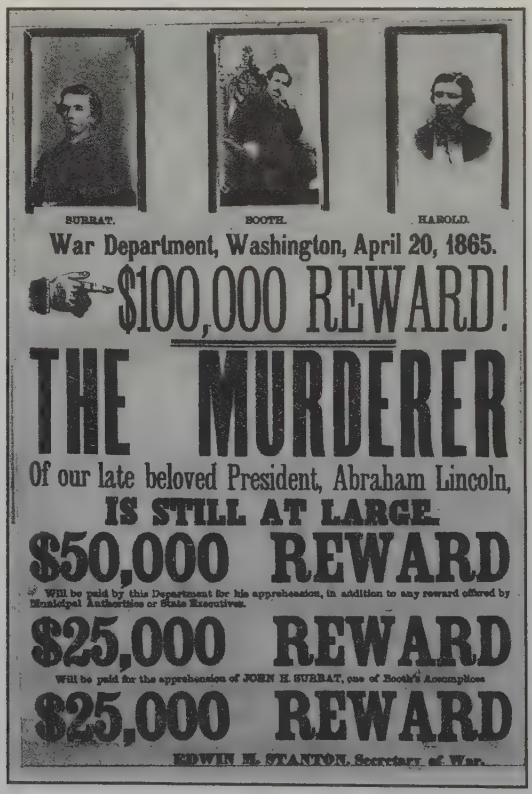
Lincoln delivers his address on the battlefield at Gettysburg, 1863.

Lincoln took an active part in military planning. This photograph, taken in 1862, shows him in conversation with General McClellan.

Abraham Lincoln, surrounded by his cabinet, deliberating the emancipation of the slaves.

A contemporary lithograph showing Lincoln as liberator of the slaves.

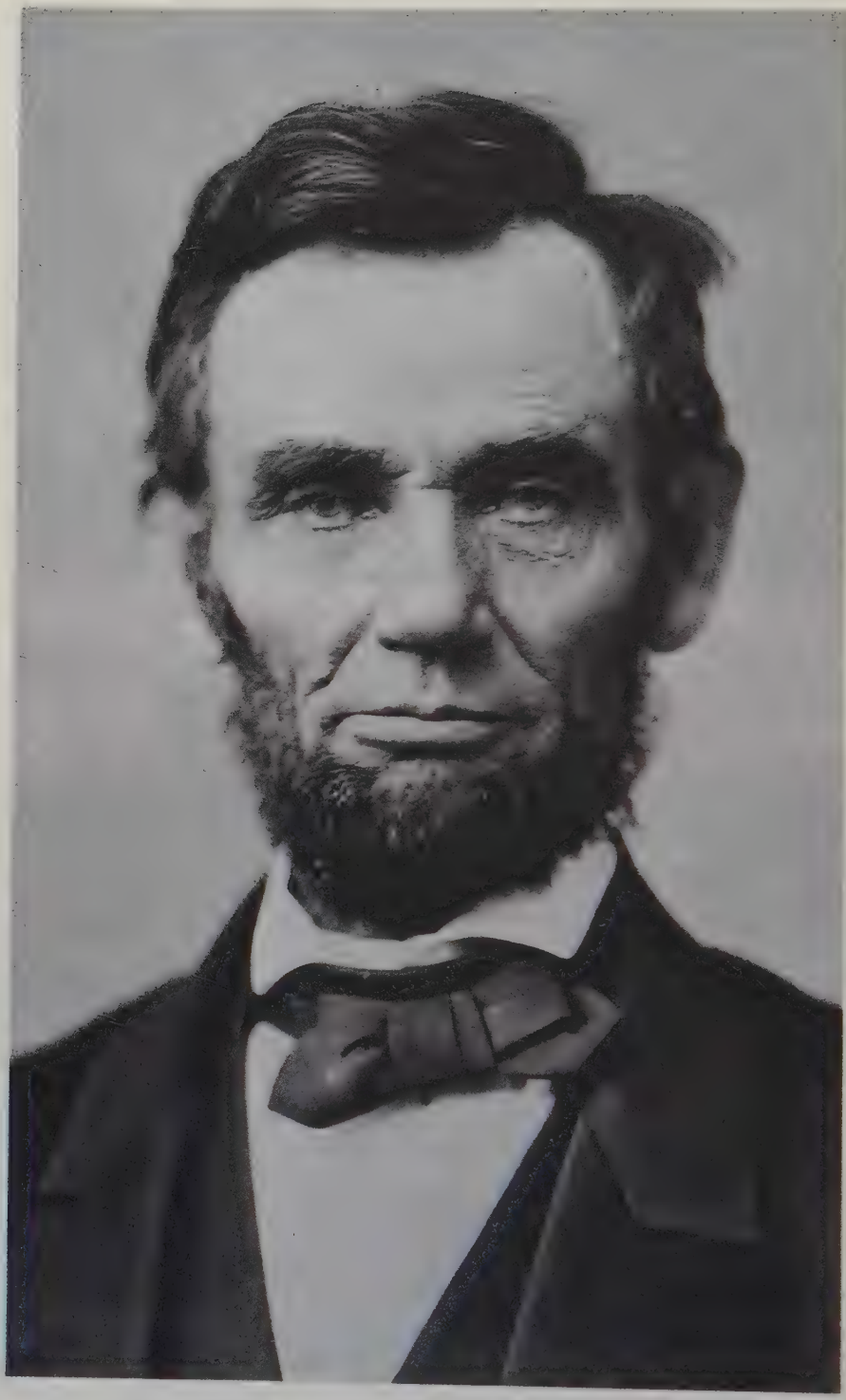
The last state reception before the assassination. Lincoln greets the wife of Vice President Johnson, who would take over his office in a few days.



Poster offering a reward for the capture of the assassins.

An artist's depiction of the assault in Ford's Theatre.

John Wilkes Booth is taken prisoner.



Abraham Lincoln, 1865

sional President of the Confederate States of America on February 18, 1861. On that same day General David E. Twiggs surrendered all the United States military outposts in Texas to the secessionists. Lincoln responded to these developments by making it clear that he intended to preserve the Union. At a brief stop in Dunkirk, New York, he stepped from the train to grasp an American flag, and he asked his audience "to stand by me so long as I stand by it."

An unexpected development threatened the image of dignified courage he was building. Allan Pinkerton, the head of the Pinkerton National Detective Agency, informed Norman Judd of a plot to assassinate Lincoln as he passed through Baltimore, a strongly pro-southern city with a long reputation for street violence. Pinkerton urged the President-elect to pass through Baltimore on a night train before the conspirators could learn of his change of plans.

At first Lincoln refused, but when young Frederick W. Seward brought news from Washington that both his father and General Winfield Scott believed the Baltimore conspiracy was genuine, Lincoln agreed to follow Pinkerton's suggestions. After addressing the Pennsylvania legislature at Harrisburg, Lincoln slipped out of town on a special train. Traveling incognito, he was accompanied by Pinkerton and Ward Hill Lamon. He was unrecognized because, instead of his usual stovepipe hat, he wore a soft felt Kossuth hat. To help conceal his tall figure, his long overcoat was thrown loosely over his shoulders without his arms being in the sleeves. Passing through Baltimore at about 3:30 a.m., Lincoln arrived in Washington unobserved.

Inevitably Lincoln's secret night ride attracted unfavorable comment, and Lincoln came to regret that he had undertaken it. It did nothing to sustain the reputation for firmness that he had been so carefully building on his long journey from Springfield.

The ten days between Lincoln's arrival in Washington and his inauguration were filled with endless calls and receptions,

which allowed him to sound out Washington sentiment about the crisis. No words were more welcome than those of Douglas, who pledged that he and his Democratic followers would not try to gain political advantage from the crisis. "Our Union must be preserved," he said solemnly. "Partisan feeling must yield to patriotism. I am with you, Mr. President, and God bless you." Greatly cheered, Lincoln responded, "With all my heart I thank you. The people with us and God helping us all will yet be well." When the Senator left, Lincoln exclaimed to another visitor, "What a noble man Douglas is!"

Lincoln's numerous conferences in the week before his inauguration also helped him make a final selection of his Cabinet members. He offered the Treasury Department to Chase and gave Cameron a choice of the War Department or the Interior Department. Rather grumpily Cameron chose the former.

The selection of Chase was a bitter dose for Seward, who had increasingly come to think of himself as the premier of the incoming Lincoln administration. In his mind, his policy of conciliating the South had saved the country during the months since the election. Counting on his enormous intelligence and undeniable charm, he was confident he could persuade the President-elect that the fever of secession should be allowed to run its course in the Deep South, while Unionism should be fostered in the upper South by avoiding all provocations. But in naming Chase, who bluntly denounced secession, Lincoln gave a signal that he was not going to follow Seward's conciliatory approach.

At noon on March 4, James Buchanan and Abraham Lincoln entered an open barouche at Willard's Hotel to begin the drive down Pennsylvania Avenue to the Capitol. Determined to prevent any attempt on Lincoln's life, General Scott had stationed sharpshooters on the roofs of buildings along the avenue, and companies of soldiers blocked off the cross streets.

Entering the Capitol through a passageway boarded so as to prevent any possible assassination attempt, Buchanan and Lincoln attended the swearing-in of Vice President Hamlin and

then emerged to a smattering of applause on the platform erected at the east portico. Introduced by his old friend, the silver-tongued E. D. Baker, Lincoln read his inaugural address, an eyewitness recalled, in a voice that "rang out over the acres of people before him with surprising distinctness." When he finished, the cadaverous Chief Justice Roger B. Taney, now nearly eighty-four years old, tottered forth to administer the oath of office to the sixteenth President of the United States.

From his address the audience could not be quite sure what the new President's policy toward secession would be. Promising that "there needs to be no bloodshed or violence; and there shall be none unless forced upon the national authority," Lincoln urged secessionists to pause for reflection: "In *your* hands, my dissatisfied fellow countrymen, and not in *mine,* is the momentous issue of civil war. . . . With *you,* and not with *me,* is the solemn question of 'Shall it be peace, or a sword?'"

He closed on a less martial note:

> We are not enemies, but friends. We must not be enemies. The mystic chords of memory, stretching from every battlefield, and patriot grave, to every living heart and hearthstone, all over this broad land, will yet swell the chorus of the Union, when again touched, as surely they will be, by the better angels of our nature.

The next morning Lincoln found on his desk a report from Major Robert Anderson that provisions for his garrison at Fort Sumter would be exhausted in about six weeks. Unless he was resupplied, he would have to surrender. The news forced Lincoln to make a hard choice: He must either reinforce Anderson's garrison or evacuate it.

Lincoln did not come to conclusions quickly, and he was temperamentally averse to making bold moves. It was his style to react to decisions made by others rather than to take the initiative himself. With his usual caution he asked General Scott to answer a set of interrogatories similar to ones he had used in

the courtroom. He received the disheartening response that it would require a naval expedition, 5,000 Regular Army troops, and 20,000 volunteer soldiers to reinforce the fort. At a time when the entire United States Army numbered 16,000, mostly scattered in outposts along the Indian frontier, the inescapable conclusion was that the fort must be surrendered.

Lincoln was not yet willing to accept that conclusion. He learned that all military experts were not as pessimistic as General Scott. Former navy lieutenant Gustavus Vasa Fox, who was knowledgeable about coastal defenses, had for some time been advocating a plan to resupply Sumter from the sea, using light-draft tugboats under cover of night. His plan got nowhere under the Buchanan administration, but now Lincoln gave it serious consideration.

On March 15 the President asked each member of his Cabinet to respond in writing to the question: "Assuming it to be possible to provision Fort-Sumpter, under all the circumstances, is it wise to attempt it?" Seward took the lead in opposing any such attempt. An expedition to relieve Sumter would "provoke combat, and probably initiate a civil war." Cameron, Welles, and Smith echoed Seward's views. Chase did not advise reinforcing Sumter if it would precipitate a war, but on the whole he thought this unlikely and therefore voted in favor of resupplying Major Anderson. Montgomery Blair strongly urged an expedition. With his advisers divided, Lincoln was unable to reach a decision. He postponed action by calling for more information.

On March 28 Lincoln received shocking advice from General Scott. He asserted that evacuation of Fort Sumter would not be enough to retain the loyalty of the upper South, including Virginia; it was necessary also to surrender Fort Pickens on the Florida coast. Only such liberality would "soothe and give confidence to the eight remaining slave-holding States."

Appalled, Lincoln managed that evening to get through the first state dinner that he and Mary gave, but he asked the Cabinet to remain afterward. Then, in a voice choked with emotion, he told them of Scott's recommendations. Blair erupted that the general was "playing politician." Except for Seward, the oth-

ers agreed. Lincoln gave notice that he would hold a formal council the next day. That night he slept not at all.

The next morning he was deeply depressed, conscious that he would have to ask the Cabinet, which met at noon, for a final judgment on whether attempts should be made to relieve Fort Sumter and Fort Pickens. Seward remained obdurately opposed to reinforcing Sumter because it would precipitate a civil war, but sensing that the President was determined to take some action, he favored holding Fort Pickens "at every cost." Caleb Smith agreed. Bates also thought Fort Pickens must be held "at all hazards." But now Chase and Welles came out unequivocally for reinforcing Sumter, and Blair threatened to resign if the President followed the advice of General Scott.

The advice of the majority of the Cabinet supported Lincoln's own view. He had already asked Lieutenant Fox for a memorandum of the ships, men, and supplies he would need to relieve Sumter, and he now directed Welles and Cameron to have an expedition ready to sail from New York by April 6.

A decision had been reached, but Seward was not willing to concede defeat. In the week between the crucial Cabinet meeting and the date for the sailing of the fleet, he continued to urge the President to explore face-saving solutions to the Sumter crisis. Anxious to avoid war, Lincoln willingly joined in these efforts.

One of Seward's schemes was to deflect the Sumter expedition by the successful reinforcement of Fort Pickens. That, it appeared, could be done without provoking hostilities with the Confederates. Seward proposed to call on Captain Montgomery C. Meigs, the army engineer in charge of construction of the Capitol, to organize an expedition to relieve Pickens. The President agreed.

Thus two projects got under way at the same time. The Sumter mission was largely a naval expedition, commanded by Fox; the Pickens expedition, sponsored by Seward, was an army affair led by Meigs. The two task forces worked in secrecy, and partly because of antagonisms among Cabinet members, each was kept largely in the dark about what its rival was doing. Inevitably, there was confusion.

On April 4 Lincoln sent Fox's expedition to Fort Sumter and notified Major Anderson that the fleet would attempt to provision the garrison. On April 6 he learned that Meigs's expedition could not possibly reach Fort Pickens before Fort Sumter must be reinforced or surrendered.

By this time Seward was almost reconciled to the inevitable, but he made one more attempt to avert hostilities. On April 6, at Seward's urging, Lincoln sent a clerk in the State Department to Charleston with orders to inform Governor Francis Pickins that "an attempt will be made to supply Fort-Sumpter with provisions only; and that, if such attempt be not resisted, no effort to throw men, arms, or ammunition, will be made, without further notice." Intended to avoid provoking South Carolina authorities, this message destroyed the slight possibility that Anderson could be secretly reinforced.

The President had little hope of results from this mission; he knew that the South Carolinians would attack any Union ship, even one known to contain only provisions. But in addition to giving Seward's schemes a last chance, he was building a historical record to prove his peaceable intent throughout the crisis. By this point he was fairly sure that the Sumter expedition would lead to bloodshed.

On April 12, while the Union fleet lay helpless offshore, the Confederates began bombarding Fort Sumter, and after thirty-four hours Anderson and his garrison were forced to surrender. The war had begun.

TEN

A People's Contest

The attack on Fort Sumter gave the Lincoln administration a clear objective: preserving the Union by putting down the rebellion. Many northerners were euphoric at the outbreak of war, confident that the Union, with its vast natural resources, its enormous superiority in manufactures, and its 300 percent advantage in railroad mileage, would prevail. Seward thought the war would be over in ninety days. The President was not so optimistic. Northerners and southerners came from the same stock. "Man for man," he predicted, "the soldier from the South will be a match for the soldier from the North and *vice versa*."

On April 15, 1861, the day after Fort Sumter surrendered, Lincoln issued a proclamation announcing that the execution of the laws in the seven states of the Deep South was obstructed "by combinations too powerful to be suppressed by the ordinary course of judicial proceedings," and he called for the states to supply 75,000 militiamen to cause the laws to "be duly executed." At the same time, he summoned a special session of Congress to meet on July 4.

A tidal wave of approval greeted his proclamation. Democrats and Republicans rallied behind the President, and the northern states had no trouble filling their quotas with eager volunteers.

But the states of the upper South, still in the Union, gave a different response. "I can be no party to this war upon the liberties of a free people. You can get no troops from North Carolina," Governor John Ellis responded to Lincoln's call, and the governors of Virginia, Tennessee, and Arkansas echoed his words. All four states promptly seceded from the Union. Within weeks all joined the Confederacy.

Reactions to Lincoln's proclamation were also unfavorable in the border slave states. "Kentucky will furnish no troops for the wicked purpose of subduing her sister Southern States," Governor Beriah Magoffin responded, and Governor Claiborne Jackson of Missouri denounced the call for troops as "illegal and diabolical." In Delaware, where slavery was a minor factor, the governor refused to comply with Lincoln's requisition but permitted volunteers to offer their services.

More important was Maryland, a state that nearly surrounded the national capital and controlled the only railroad access to the District of Columbia. "The excitement is fearful," Governor Thomas Hicks and Baltimore mayor George W. Brown telegraphed the President on April 18. "Send no troops here." The next day the 6th Massachusetts Regiment, on its way to defend Washington, was attacked by a secessionist mob as it attempted to cross Baltimore. Four soldiers, along with some civilians, were killed. Lincoln wanted to shore up the governor, a wavering Unionist who tended to collapse under secessionist pressure, and he agreed for the time that reinforcements would be marched around, rather than through, Baltimore. But he doubted that this arrangement would last, and he was right. Shortly afterward a Baltimore committee descended on his office to ask him to stop sending any troops through Maryland. That was too much for Lincoln. He explained that he had to have troops to defend the capital, and they could only come across Maryland. "Our men are not moles, and can't dig under the earth; they are not birds, and can't fly through the air," he reminded the committee. "Go home and tell your people that if they will not attack us, we will not attack them; but if they do attack us, we will return it, and that severely."

The threat was an empty one. Lincoln did not have enough troops to defend Washington, much less to reduce Baltimore. After the firing on Fort Sumter, there had been a steady exodus of pro-Confederate officials, including high-ranking army and navy officers. The most notable was Robert E. Lee, who declined an offer to head the Union armies because he felt he must go with his state, Virginia.

For nearly a week Washington was virtually under siege. Marylanders destroyed the railroad bridges linking Baltimore with the North and cut the telegraph lines. A Confederate assault from Virginia was expected daily. In the lonely hours Lincoln paced the floor of the White House, gazing wistfully down the Potomac for the sight of ships bringing reinforcements, and eventually broke out in anguish, "Why don't they come! Why don't they come!"

On April 25 the arrival of the 7th New York Regiment changed the picture. General Benjamin F. Butler had discovered an ingenious way of circumventing Baltimore by ferrying men down the Chesapeake Bay to Annapolis, where they could be entrained for Washington. Thousands of troops were soon pouring into the capital. To make certain that Maryland remained loyal, General Butler also occupied Federal Hill, overlooking Baltimore harbor, on May 13.

Meanwhile, on April 27, Lincoln authorized the suspension of the writ of habeas corpus along the route between Washington and Philadelphia. This meant military authorities could make summary arrests of persons thought to be aiding the Confederacy. Such persons could be detained indefinitely without judicial hearing and without indictment, and the arresting officer was not obliged to release them when a judge issued a writ of habeas corpus.

The situation in Kentucky was just as critical as that in Maryland. Lincoln could not let his native state, which controlled the south bank of the vital Ohio River, fall under Confederate control. Fortunately, he had sober and responsible friends in Kentucky, like Joshua Speed and his brother James, a prominent attorney in Louisville, on whose advice he could im-

plicitly rely. When Kentucky adopted a policy of neutrality, the President shrewdly avoided a confrontation. He promised that "if Kentucky made no demonstration of force against the United States, he would not molest her."

Less successful was Lincoln's handling of Missouri, a border slave state of enormous strategic importance because it controlled traffic on the Ohio, Mississippi, and Missouri river network so vital to the Northwest. Not familiar with the politics of the state, Lincoln failed to support a truce worked out between the pro-southern faction and pro-Union forces. Internecine war resulted.

Lincoln was less involved in attempts to hold Virginia in the Union. Delegates from the strongly Unionist western counties, outraged when the state convention voted to secede, returned to their homes resolved to secede from secession. A Unionist convention held at Wheeling in effect set up a rival government to the Confederate government of Virginia in Richmond and then applied for admission to the Union as the state of West Virginia.

While maintaining a tenuous hold on these border states, Lincoln took steps to increase northern preparedness. On May 3 he called up additional volunteers. Without waiting for congressional authorization, he also expanded the army and navy. Earlier, on April 19, he had proclaimed a blockade of Confederate ports. He also authorized the Treasury Department to advance $2 million to a New York committee to pay "such requisitions as should be directly consequent upon the military and naval measures necessary for the defense and support of the government."

In the weeks after the firing on Fort Sumter, the demands on the President's time were incessant, but he bore up well under the strain. One visitor to Washington was delighted to discover, contrary to rumor, that Lincoln was not exhausted or sick, but instead appeared "very fresh and vigorous . . . thoroughly calm and collected."

* * *

Lincoln's July 4, 1861, message to the special session of Congress clearly defined his view of the war. The conflict, he maintained, was not a war between the government of the United States and that of the Confederate States of America. So to define it would acknowledge that the Union was not a perpetual one and that secession was constitutional. Throughout the next four years he sustained the legal fiction that the war was an "insurrection" of individuals in the southern states. Though he sometimes referred to the conflict as a civil war, he usually called it a rebellion. He never recognized that any of the southern states was, or could be, out of the Union, and he did not identify the enemy as the Confederate States of America.

This view of the war had far-reaching implications. Because in his eyes the Confederacy did not exist, there could never be any negotiations leading to recognition or a peace treaty. Because the insurrection was the work of individuals, the states of the South remained fully entitled to all the protections guaranteed by the Constitution. Those guarantees covered the right of private property—including slaves. Punishment for participating in the rebellion could be inflicted on traitorous individuals, not on the states in which they resided, and when victory came to the Union cause, the southern states would be, as they had always been, equal to all others in the United States.

Lincoln's July 1861 message, together with his proclamations, also made it clear that he considered the prosecution of the war primarily a function of the Chief Executive, to be carried out with minimal interference from the other branches of government. Proclaiming a blockade, increasing the size of the army and navy, and entrusting public funds to private persons for the purchase of arms and supplies would ordinarily require congressional approval, but the emergency required the President to act before such authorization was granted.

Even touchier was his decision to suspend the privilege of the writ of habeas corpus. In neither law nor precedent was it clear where the authority for such suspension lay. But in his message to Congress the President claimed that in an emergency, when

Congress was not in session, the Chief Executive was obliged to act. It was clear that devotion to civil liberties was not the primary concern of Lincoln's administration, and the next years would see greater infringements on individual liberties than in any other period in American history.

The Congress that heard Lincoln's message on July 5 was controlled by members of his own party. The Democratic Party, decimated by secession, had been further demoralized by the unexpected death on June 3 of Stephen A. Douglas, who might have led a loyal opposition to the Lincoln administration. But the reception of the President's message indicated that party lines were, for the moment, unimportant. Few had the heart to engage in partisan bickering, and "irrepressible applause" greeted Lincoln's recommendation that Congress appropriate $400 million to sustain an army of 400,000 men. Going beyond the President's requests, Congress promptly appropriated $500 million to field an army of 500,000 men. It also moved to pass bills retroactively approving most of Lincoln's extraconstitutional actions. There was dissent only on the suspension of the writ of habeas corpus, which made many unhappy. But discord was muted because the Union army was preparing to advance.

Pressure for an offensive had been building ever since Lincoln's initial call for troops. It became explosive after federal troops suffered minor setbacks during the early months of the war. The most conspicuous of these occurred on May 24, the day after Virginia ratified its ordinance of secession, when Lincoln directed federal troops to cross the Potomac and occupy Alexandria. The Union forces included a Zouave regiment recruited by young Elmer Ellsworth, who had until recently read law in the offices of Lincoln & Herndon. The Virginia troops were compelled to withdraw. Flushed with victory, Ellsworth spotted a secession flag flying above the Marshall House—a flag the President could see with his spyglass from the White House—and dashed up the stairs to tear it down. On his way down, the hotelkeeper shot and killed Ellsworth. The

death deeply grieved Lincoln, who thought of the young officer as almost another son.

The tragedy reinforced the drumbeat of politicians and newspapers calling for action. Up to this point Lincoln had favored delay, but he now ordered an advance against the Confederate army near Manassas, Virginia, where it was a constant threat to Washington.

Since General Scott was too old and infirm to take the field, Lincoln gave the command to General Irwin McDowell, a forty-two-year-old West Point graduate who had served with distinction in the Mexican War. On June 29 Lincoln met with his advisers in the White House to discuss McDowell's plans. Believing that Confederate general P. G. T. Beauregard had about 35,000 men at Manassas, he proposed to attack the rebels before they could be reinforced.

Authorized to begin his campaign on July 9, McDowell was not ready to move until a week later—a costly delay that gave the Confederacy a chance to reinforce Beauregard's army with Joseph E. Johnston's troops from the Shenandoah Valley. Slowly McDowell's army marched out to meet the Confederates at Manassas. (That is what the southerners called the place; Yankees found that one southern crossroads looked much like another, and they called the field of engagement Bull Run, after the creek that meandered near it.) McDowell's army was accompanied by numerous Congressmen, scores of newspapermen, and many of what a reporter called "the fairer, if not gentler sex," many of whom brought picnic baskets in their buggies.

Assured by Scott that McDowell would be successful, Lincoln went to church on July 21. In midafternoon he went to Scott's office, only to find the general in chief taking his afternoon nap. When the President woke him, the general said that early reports from the battlefield signified nothing, and before dropping off to sleep again, he predicted victory. But by six o'clock that evening Seward came to the White House with the news that McDowell's army was in full retreat.

That night, stretched out on a couch in the Cabinet Room, the President listened to firsthand reports from terrified eyewitnesses of the defeat. He did not go to bed.

The next day Lincoln learned that the Union army had fought bravely and well, and would have won the battle except for the arrival of Johnston's forces. Even then, most of the Union regiments had retreated in good order; the army was defeated but not crushed.

Bull Run was a severe Union defeat, and the President moved immediately to remedy the causes. To boost morale, he visited the fortifications around Washington and assured the troops that he would make sure they had all needed supplies. Deciding that a new commanding general was necessary, he summoned George B. McClellan, the hero of small engagements in western Virginia, to take charge of the forces around Washington.

During the next months, while McClellan was training the soldiers, Lincoln had a breathing spell from political pressure, and he and his family could for the first time enjoy living in the White House. Initially they had been overwhelmed by the size of the executive mansion. The East Room alone was about as large as their entire Springfield house. Except for the family dining room, the first floor was open to visitors. An aged Irish doorkeeper, Edward McManus, was supposed to screen visitors, but in practice, anybody who wanted to could stroll in. On the second floor nearly half the rooms were also public, so that the Lincolns' private quarters, which at first seemed so palatial, proved to be remarkably constricted. The upstairs Oval Room became the family sitting room. The two adjoining rooms on the south side were those of the President and Mrs. Lincoln. Across the corridor were the state guest room and the infrequently used room of Robert, who was now attending Harvard College. Tad and Willie had smaller rooms on the north side.

The younger boys found endless opportunities for mischief and adventure in the executive mansion. Catching the martial spirit, Willie and Tad took great pleasure in drilling the neighborhood boys. With Bud and Holly Taft, sons of a federal judge who lived nearby, they commandeered the roof of the mansion for their fort. There, with small logs painted to look like cannons, they fired away at unseen Confederates across the Potomac.

Children in the White House were something new for Americans, and citizens began showering the boys with presents. Someone gave Willie a beautiful little pony, to which he was devoted. Two small goats, Nanko and Nanny, frisked on the White House grounds and seemed to have the run of the White House.

When Lincoln could find time, he played with his boys. One day Julia Taft, the teenage sister of Bud and Holly, heard a commotion in the upstairs Oval Room and entered to find the President lying on his back on the floor, Willie and Bud holding down his arms, Tad and Holly, his legs. "Julie, come quick and sit on his stomach!" cried Tad as the President grinned at her grandly.

But such times were rare because Lincoln worked hard. After a meager breakfast he went immediately to his office, where he signed as many papers as he could before the day's regular schedule began. Adjoining the President's office were rooms occupied by his small staff, which included his private secretary, the methodical Nicolay, and the effervescent John Hay, Nicolay's assistant. Both young men were devoted to Lincoln and were convinced that he would be remembered as a great President.

From early morning until dusk, visitors thronged the business rooms of the White House. In the early months of the administration the line extended down the stairs to the front entrance, with a candidate for a job or a military appointment perched on each step. Most of these applicants could be handled expeditiously. Lincoln quickly scanned letters of recommendation, referred petitioners to the proper department heads, and listened intently to complaints.

Stories of the President's accessibility to even the humblest petitioner, his patience, and his humanity spread throughout the North. People referred to him as Father Abraham, and they showered him with homely gifts: a firkin of butter, a crate of Bartlett pears. With special appropriateness a man from Johnsburgh, New York, sent the President "a live American Eagle[,] the bird of our land," which had lost one foot in a trap. "But," the New Yorker continued, "he is yet an

Eagle and perhaps no more cripled [*sic*] than the Nation whose banner he represented, his wings are sound and will extend seven feet."

At the same time, Mary Lincoln was achieving successes of her own. Brought up with an active interest in public affairs and deeply involved in her husband's political career, she intended to become the First Lady of the Land—a term that was coined to describe her. She enjoyed her role as hostess. Finding the White House in bad shape, she made refurbishing the mansion her main project. Congress had appropriated $20,000 to be expended over the four years of her husband's term of office for rehabilitating the executive mansion, and she intended to put it to good use.

In the summer of 1861 she went to Philadelphia and New York to buy suitable furnishings. Merchants showed her the best and most expensive carpeting, splendid furniture, and exquisite china. Mary was not entirely rational when it came to money, and having no head for figures, she bought everything: chairs, sofas, fabrics, wallpaper imported from France, and a full set of Haviland china in "Solferino and gold," with the American coat of arms in the center of each plate. For the East Room she ordered an imported Brussels velvet carpet, pale green in color, ingeniously woven as a single piece.

On her return to Washington she personally oversaw the scrubbing, painting, and plastering, so that for the first time in years the entire mansion was sparkling clean. When her new furniture arrived, the whole place took on an air of elegant opulence. But by fall, when the bills began to come in, she discovered that she had overspent the congressional allowance not just for the year but for Lincoln's full term. Desperately she tried to keep her husband from learning what she had done. In her panic she exploded in rage at anyone who dared cross her. Nicolay and Hay began to refer to her as the Hellcat.

To cover her enormous overrun of expenditures, she had to ask the commissioner of public buildings, who kept the White House accounts, to ask the President to sponsor a supplemental congressional appropriation. Lincoln was furious. Never, he

said, would he ask Congress for an appropriation "for flub dubs for that damned old house," especially when "the poor freezing soldiers could not have blankets." Rather than ask Congress for more money, he vowed he would pay for Mary's purchases out of his own pocket. Eventually, though, he was obliged to back down, and Congress quietly passed two appropriations to cover rehabilitating the White House.

After the defeat at Bull Run, support for the President rapidly eroded. Many Democrats accepted the war as long as it was fought to preserve "the constitution as it is and the Union as it was," but they were nervous lest a prolonged conflict prove "the Trojan horse of tyranny." A few, like James A. Bayard of Delaware and Clement L. Vallandigham of Ohio, willingly acknowledged that they were Peace Democrats. Bayard took as his motto "Anything is better than a fruitless, hopeless, unnatural civil war."

These divisions deeply troubled Lincoln. He recognized that his administration could not possibly put down the rebellion without assistance from the Democrats. Consequently, he carefully cultivated those who were styled "War Democrats" in Congress—men like Andrew Johnson of Tennessee, the only southern Senator who refused to follow his state when it seceded. A sizable number of the generals Lincoln selected were Democrats, including McClellan.

In policy, too, he tried to build a broad base of support by presenting the issue before the country as one of Union versus Disunion. But in so doing, he risked dividing his own party. Many Republicans felt he was neglecting the arguments against slavery that had been the foundation of their party's ideology. Two days after the defeat at Bull Run, Senator Zachariah Chandler of Michigan and Senator Charles Sumner of Massachusetts, accompanied by Vice President Hamlin, urged the President to make the war a contest between freedom and slavery. Sumner argued that emancipation was a military necessity, and Chandler asked Lincoln to free the slaves in order to create such chaos in the South that the Confederacy would col-

lapse. The President said such measures were too far in advance of public opinion.

Matters came to a head when General John C. Frémont, named commander of the Department of the West, took drastic steps to end widespread guerrilla warfare in Missouri. Proclaiming martial law in the entire state, Frémont announced that civilians bearing arms would be tried by court-martial and shot if convicted, and that slaves of persons who aided the rebellion would be emancipated.

Frémont's proclamation, issued without consultation with Washington, clearly ran counter to the policy Lincoln had announced in his inaugural address of not interfering with slavery. In the border slave states the edict dealt a heavy blow to Unionist sentiment, and Lincoln directed Frémont to modify parts of it. If the general's order had been allowed to stand, he explained, Kentucky would probably have seceded. "Kentucky gone, we can not hold Missouri, nor, as I think Maryland." Lincoln would not permit civilian authority to be overruled by the military, and he would not allow sensitive questions concerning slavery and emancipation to be decided by anyone but the President himself.

Meantime, criticism of the slow pace of the war effort focused on McClellan. At first everybody admired the thirty-four-year-old general. Handsome, with blue eyes and reddish brown hair, he gave an impression of strength and vigor, and there was only admiration for the way he reorganized the forces around Washington. A skilled engineer, he developed a ring of fortifications to protect the city from surprise attacks. Dashing about on a magnificent horse, he seemed omnipresent. No detail of his soldier life was too small to escape his notice, and he was loved by the men under his command, who, after August 15, were called the Army of the Potomac.

But by fall McClellan's honeymoon ended. Senator Chandler, originally one of McClellan's strongest backers, blamed his failure to launch an offensive against the Confederates on a "timid vacil[l]ating and inefficient" administration. Chandler and others began worrying Lincoln into forcing McClellan to fight.

On October 21 McClellan's critics were infuriated further when, after long inaction, an element of his army ventured across the Potomac at Ball's Bluff (or Leesburg), ran into fierce Confederate opposition, and was thrown back with heavy losses. Congress exploded into wrath at McClellan for having allowed such an ill-planned expedition, and lawmakers began to suspect that he might be disloyal to the Union.

McClellan defended himself by telling his congressional critics that he was hamstrung by the nearly senile General Scott. They then descended on the White House to nag Lincoln into removing Scott, and on November 1, with a heavy heart, the President accepted Scott's offer to retire. That left McClellan in charge, and Lincoln designated him to command the whole army of the United States. He was now in charge not merely of the Army of the Potomac but of Don Carlos Buell's Army of the Ohio, which was preparing to push into Tennessee, and of Henry W. Halleck's Army of the Missouri, which was to move down the Mississippi River. In giving increased responsibility to McClellan, Lincoln said, "The supreme command of the Army will entail a vast labor upon you." Quietly McClellan responded, "I can do it all." But he still failed to launch a campaign.

Frustrated over the failure of Union armies to advance and angry over mounting expenses, Congress moved rapidly to take charge. On December 3, 1861, the day the new session opened, Senator Lyman Trumbull gave notice that he would introduce a bill for the confiscation of the land and slaves of all persons who were in arms against the United States or who aided or abetted the rebellion. The Illinois Senator, once Lincoln's ally, was convinced the President lacked "the will necessary in this great emergency" and believed that Congress must take steps to bring the war to a quick end. Congress would eventually pass the Confiscation Act, and Lincoln would sign it.

Other Congressmen tried to move the stalled war effort along through investigating committees. Most significant were the activities of a special committee named to look into allegations of fraud and mismanagement in government contracts.

Lincoln did not need a congressional investigation to tell him that the War Department was badly run. Secretary Cameron, he remarked confidentially to Nicolay, was "utterly ignorant . . . Selfish and openly discourteous to the President." If he had any doubts, his mail offered a chorus of objections to the Secretary of War. "It is universally believed that Cameron is a thief," a New Yorker wrote the President, detailing how the War Department sold soldiers half-cotton blankets for the same price as regulation all-wool blankets.

Even though Lincoln had not wanted Cameron in his Cabinet initially, he hesitated to fire him and tried to get rid of the Secretary by dropping hints. But Cameron was impervious to suggestion, and as pressure for his resignation grew, the Secretary took a daring gamble. When asked, as were the other members of the Cabinet, to prepare a report on the activities of his department to be submitted to Congress, he included an announcement that "it is clearly a right of the Government to arm slaves . . . and employ their service against the rebels." He then sent the document to newspapers without informing the President. Lincoln immediately ordered the report recalled and Cameron's remarks expurgated. After that, it was simply a matter of time before Cameron left the Cabinet. The President would not allow Frémont or Cameron to set government policy on slavery.

On January 11, 1862, Lincoln curtly notified Cameron that he could now gratify his "desire for a change of position" by nominating him as minister to Russia. Cameron had no such desire, and he broke into tears when Secretary Chase gave him Lincoln's letter. To save Cameron's feelings, the President withdrew his letter so that Cameron could submit his resignation.

Investigations of military affairs fell to the Joint Committee on the Conduct of the War, set up at the beginning of the current session of Congress to look into the activities—or the lack of activities—of the Army of the Potomac. Both the committee and the President were eager to learn McClellan's plans, but the general declined to tell them. He dropped a cryptic hint to Lincoln that he no longer thought of advancing against the

Confederate army at Manassas and had his "mind actively turned towards another plan of campaign . . . not at all anticipated by the enemy nor by many of our own people." The committee did not get even this much from him. He was called to testify, but shortly before Christmas he fell ill with typhoid fever.

ELEVEN

The Bottom Is Out of the Tub

"The Prest. is an excellent man, and, in the main wise," Attorney General Bates recorded in his final diary entry of 1861; "but he lacks *will* and *purpose,* and, I greatly fear he, has not *the power to command.*" That judgment represented a widely held opinion. Nearly everybody thought the President was honest and well meaning. But few thought he was up to his job. He seemed unable to make things go right. As the costs of the war mounted, the Treasury lived on credit, and banks throughout the country had to suspend specie payments. In the Northwest, farmers were suffering as laborers went off to the army, and there was no market for farm produce because the Mississippi River was closed. So desperate did things look in early January 1862, that Lincoln for the first time thought the Confederates might be successful, and he spoke "of the bare possibility of our being two nations."

At the heart of the problem was the failure of the armies to win victories. With a growing sense of desperation Lincoln began to think of leading an army into battle himself, and he borrowed books on military strategy from the Library of Congress. But he knew he was no military man. On January 10, while visiting Quartermaster General Montgomery C. Meigs, he summed up his difficulties: "The people are impatient; Chase has no money and he tells me he can raise no more; the General of the Army has typhoid fever. The bottom is out of the tub."

That evening Lincoln invited General McDowell and General William B. Franklin to the White House, where they met with him, Seward, Chase, and Assistant Secretary of War Peter Watson. To this informal council of war the President poured out his problems. If General McClellan was not going to use the Army of the Potomac, the President said, "he would like to *borrow* it, provided he could see how it could be made to do something." The generals gave different advice. McDowell urged another move against Manassas, while Franklin, who knew something of McClellan's wishes, talked of moving the army down the Potomac, so as to advance on Richmond from the east. The President asked the two generals to learn more about the actual state of the army and to come back the next day.

When the informal council of war reassembled, the commanders agreed that a move on Manassas would be best, but Meigs and Montgomery Blair, who had joined the group, opposed this strategy, fearing it would lead to another defeat. Unsure how to resolve the conflict, Lincoln again adjourned the meeting.

On January 13 McClellan rose from his sickbed to join in the discussion. Clearly regarding these meetings as a conspiracy against him, he was sullen and uncommunicative. All Lincoln could get from him was a pledge that he had a specific time in mind for an advance. He was unwilling to divulge more, because he believed the fewer persons who knew his plans the better.

Military affairs took a turn for the better when Lincoln replaced Secretary of War Cameron with Edwin M. Stanton. The appointment was a surprising one. Stanton, a brilliant lawyer from Pittsburgh and a lifelong Democrat, had been Attorney General in the last days of the Buchanan regime, and since the outbreak of the war, in private correspondence, he had unsparingly criticized the Lincoln administration, but he had maintained a discreet silence in public. Opposed to slavery, Stanton was secretly the author of the passage in Cameron's report that called for arming the slaves; he was thus responsible for the firing of the man whom he succeeded.

Stanton was neither amiable nor altogether stable, but Lincoln found him indispensable, and the two men eventually developed an excellent working relationship. A short, stocky figure, the fifty-seven-year-old new Secretary of War was highly intelligent and fiercely honest. He worked standing behind a high desk, excoriating shoddy contractors and blasting military officers angling for promotion. His extraordinary energy reminded Lincoln of an old Methodist preacher whose parishioners wanted to put bricks in his pockets to hold him down. "We may be obliged to serve Stanton the same way," Lincoln told a Congressman, "but I guess we'll just let him jump a while first."

With Stanton in control at the War Department, the President could turn his attention back to the armies. McClellan, whose health was now fully restored, was still reluctant to divulge his plans. But in mid-January, Union armies in the West began to win victories. On January 19 General George H. Thomas broke the Confederate line in eastern Kentucky. On February 6 General Ulysses S. Grant, aided by navy gunboats, captured Fort Henry on the Tennessee River and eleven days later forced Fort Donelson to surrender. The Confederates had to abandon Kentucky and most of Tennessee, and on February 25 Buell's Army of the Ohio occupied Nashville. In the national capital there was a sense of euphoria, a belief that with one big push by the Army of the Potomac, the Confederacy could be defeated. Even Lincoln shared in the optimism.

A large party the Lincolns gave on February 5 was a sign of the changing times. Ignoring the advice of protocol officers at the State Department that the President's entertainment should be confined to small dinners, Mary Lincoln decided to show off the newly refurbished White House to 500 invited guests.

Guests were greeted in the East Room by the President, who was wearing a new black swallowtail coat, and the First Lady, whose white silk dress, decorated with hundreds of small black flowers, exposed a remarkably low décolletage. In the background the United States Marine Band played, its repertoire including a sprightly new piece, "The Mary Lincoln Polka." At midnight the dining room was opened to reveal a magnificent

buffet displaying sugary models of the ship of state, Fort Sumter, and Fort Pickens flanked by mounds of turkey, duck, ham, terrapin, and pheasant. Altogether, the Washington *Star* concluded, the party was "the most superb affair of its kind ever seen here."

The Lincolns' celebrations were short-lived. Shortly before the party their son Willie had fallen ill with "bilious fever"—probably typhoid, caused by pollution in the White House water system. His anxious parents considered canceling the reception, but the family doctor assured them the boy was in no immediate danger. Even so, both the President and his wife slipped upstairs during the party to be with their son. During the next two weeks Tad came down with the same illness, while Willie grew worse and worse.

Sitting up with his sick children night after night, Lincoln was able to transact little business, but he seemed to stumble through his duties. As Willie grew weaker, Lincoln began to despair of his recovery. On February 20 the end came. Both parents were devastated by grief. When Lincoln looked on the face of his dead son, he could only say brokenly, "He was too good for this earth."

Lincoln increasingly turned to religion for solace. In the weeks after Willie's death he had several talks with the Reverend Phineas D. Gurley, pastor of the New York Avenue Presbyterian Church in Washington, where the Lincolns rented a pew. The clergyman comforted him with the assurance that Willie was not dead but still lived in heaven. Lincoln may not have believed him, but he wished to believe him. Even so, he did not become a member of any Christian denomination, nor did he abandon his fundamental fatalism. He continued to quote *Hamlet:*

> There's a divinity that shapes our ends,
> Rough-hew them how we will.

Mary Lincoln's grief over Willie's death was even more devastating than her husband's. Having earlier lost Eddie, she could

not deal with this second death. She took to her bed, so desolate that she could not attend the funeral or look after Tad. For months the mere mention of Willie's name sent her into paroxysms of weeping, and never again did she enter the bedroom where he died. When she finally emerged from her room, she went into such profound mourning dress that she was almost invisible under the layers of black veils and crepes. For nearly a year all social activities at the White House were suspended.

At about the time of Willie's death, Lincoln's optimism about military affairs also began to vanish. After the victories at Forts Henry and Donelson the armies in the Mississippi Valley seemed unable to advance. Reports spread that Grant had gone back to his old habits, and in Washington he was now considered "little better than a common gambler and drunkard."

Even less encouraging were the activities of the Army of the Potomac. McClellan, who had finally been compelled to discuss his strategy with his Commander in Chief, was now convinced that the proper object of the Union army was an attack on Richmond from the east. In Lincoln's view the campaign ought to be directed not against the southern capital but at the Confederate army. He favored a direct advance on Manassas and feared that if McClellan moved his army down the Potomac to attack Richmond, he would leave Washington exposed.

In the end, McClellan agreed to consult the division commanders of the Army of the Potomac on his plan. Eight of them, younger generals who owed their promotion to McClellan, favored it. The four senior men were opposed. The President felt he had no choice but to accept the decision of the majority, and he authorized McClellan to go ahead. But he was still unconvinced, and he made his dissatisfaction plain by ordering the reorganization of the twelve divisions of the Army of the Potomac into four corps. This action was a sensible one. The Army of the Potomac was now so vast that no one commander could give sufficient attention to each of the twelve separate divisions.

As corps leaders, Lincoln named Generals E. V. Sumner, Irvin McDowell, Samuel P. Heintzelman, and Erasmus D. Keyes—the

first three of whom had opposed McClellan's plan of campaign. Lincoln also issued a general war order forbidding the Army of the Potomac to change its base of operations until McClellan and the four corps commanders declared Washington entirely secure.

Three days later Lincoln clipped McClellan's wings even closer by relieving him of his duties as general in chief. Henceforth he was simply to be commander of the Department of the Potomac. Lincoln's order consolidated the several armies in the Mississippi Valley under the command of General Halleck, who claimed most of the credit for forcing the Confederates to surrender Forts Henry and Donelson. In order to pacify the abolitionists, General John C. Frémont was given command of the new Mountain Department, where it was assumed he would try to liberate the Unionists of eastern Tennessee. All three department commanders were to report directly to the Secretary of War. McClellan himself had favored such a reorganization and accepted his demotion in good spirits.

The President's confidence in the general was further weakened when, hearing that the Confederates were pulling back from Manassas, McClellan led the entire Army of the Potomac, 112,000 strong, to see what was happening. The Confederates were indeed gone, and it was clear that they had numbered less that 50,000—about half of what McClellan had estimated. Their "formidable" fortifications turned out to be mostly logs painted to resemble cannons. The whole country gave a giant horselaugh.

After McClellan's demotion the President and the Secretary of War found themselves swamped by administrative detail as they tried to direct huge armies spread over half a continent. They received little encouraging news from any front. At Pittsburg Landing on the Tennessee River, the Confederates came close to routing Grant's army in the Battle of Shiloh on April 6–7. The timely arrival of Buell's forces helped save the day, and in the end, Shiloh was a great Union victory. But the 13,000 Federal casualties marked this as the bloodiest engage-

ment yet. Halleck blamed Grant for the losses, and there was strong sentiment to have Grant removed. Lincoln overruled the objections with the quiet comment, "I can't spare this man; he fights."

In the East, progress was no more rapid. McClellan advanced toward Richmond at the rate of about two miles a day, constantly complaining that he was facing overwhelming odds, that he was handicapped by heavy rains, that he needed reinforcements. On May 31 the Confederate army, commanded by Joseph E. Johnston, launched an attack on the Army of the Potomac while it was divided by the Chickahominy River. The army fought fiercely in this Battle of Seven Pines (or Fair Oaks) and on the second day forced the Confederates back on the defenses of Richmond. In the struggle Johnston was wounded, and Robert E. Lee became the new commander of the southern army.

With an army of 130,000 men McClellan prepared to advance on Richmond as soon as the rains ended and the roads permitted the passage of artillery. But on June 25, before he could launch his assault, the Confederates ripped into his army. He had completely misjudged the new Confederate commander, considering Lee "too cautious—personally brave and energetic . . . yet likely to be timid and irresolute in action." In a series of hard-fought engagements the Confederates forced the Army of the Potomac to retreat down the Peninsula to take refuge under the protection of federal gunboats on the James River.

While the Army of the Potomac was engaged in desperate fighting on the Peninsula, Lincoln slipped out of Washington and went to West Point, where General Scott was spending the summer. The immediate problem the two men discussed was whether McDowell's corps, stationed at Fredericksburg to protect the capital, should join McClellan's army on the Peninsula. The general recommended that it be done, but nothing that Scott told the President convinced him to send McDowell's corps to join McClellan's. Instead, he ordered the consolidation of all Union forces in northern Virginia, including Frémont's and McDowell's, into the new Army of Virginia, and he ap-

pointed John Pope to command it. In a huff Frémont declined to serve under Pope, whom he outranked, and went on inactive duty. Behind Lincoln's decision was his growing belief that McClellan would never fight a decisive battle to take Richmond.

In early July, Lincoln visited McClellan's headquarters at Harrison's Landing to inspect the Army of the Potomac. "Long and hearty was the applause and welcome which greeted him," one lieutenant recorded in his diary. "His presence after the last disaster seemed to infuse new ardor into the dispirited army." The dispirited commander of that army did not share their enthusiasm. Writing to his wife, McClellan said Lincoln was "'an old stick'—and of pretty poor timber at that."

Shortly after Lincoln reached the army, McClellan handed him a confidential letter in which he outlined his "general views concerning the existing state of the rebellion." His theme was that the war against the Confederates "should be conducted upon the highest principles known to Christian Civilization." That meant there must be no confiscation of rebel property, no "forcible abolition of slavery." The letter was couched in respectful language, and there was nothing insubordinate about it. But it made clear McClellan's view that the war should continue to be waged between professional armies, with minimal disruption of civilian life.

That policy had been pursued for over a year, and Lincoln was convinced that it had failed. He was ready to move on. He made no comment on the letter except to thank the general for his opinions. Two days after he returned to Washington, Lincoln named Henry W. Halleck "to command the whole land forces of the United States, as General-in-Chief." That appointment signaled a repudiation of McClellan and of McClellan's view of the war.

It was a decision Lincoln had been working through for many weeks. Clearly he had had in mind both a change in command and a change in strategy when he visited General Scott at West Point in June. He then appointed Pope as commander of the new Army of Virginia. The President had confidence in this

handsome black-bearded general who was the son of an old Illinois associate and who had served well along the Mississippi. He liked Pope's idea of warfare. Boastful and indiscreet, Pope made no secret of his scorn of eastern generals like McClellan, who he thought grossly overestimated the strength of the Confederates, and he made it clear that, unlike McClellan, he would not fight a soft war.

Bustling and energetic, the new general whipped his troops into shape and planned for a direct overland advance against the Confederate capital—just the strategy Lincoln had unsuccessfully urged McClellan to follow. Greatly encouraged, Lincoln by mid-August was so confident he told Senator Charles Sumner the Union army would be in Richmond within two weeks.

Two days after Lincoln appointed Halleck general in chief, he made an equally significant shift in his policy toward slavery. Committed to his inaugural pledge that the federal government would not interfere with slavery in the states where it already existed, Lincoln had been urging the individual states to adopt a plan of gradual compensated emancipation. In March 1862 he had sent a message to Congress on the "abolishment" of slavery, the first such proposal ever submitted to Congress by an American President. In the message he urged Congress to adopt a joint resolution declaring "that the United States ought to cooperate with any state which may adopt gradual abolishment of slavery, giving to such state pecuniary aid, to compensate for the inconveniences public and private, produced by such change of system." Such a declaration, he held, was strictly constitutional because it allowed each state "perfectly free choice" to accept or reject the proposed offer. Congress endorsed the President's proposal, but none of the border states accepted it. The only concrete result of the effort was a bill for compensated emancipation in the District of Columbia, which Lincoln signed on April 16.

By mid-July, when Congress adjourned, the President was moving toward a new course of action. On July 13, riding in a

carriage with Secretaries Seward and Welles to the funeral of Stanton's infant son, he informed those two conservative members of his Cabinet that he "had about come to the conclusion that we must free the slaves or be ourselves subdued." McClellan's defeats on the Peninsula contributed to his decision, as did the growing chorus of antislavery opinion in the North and the dwindling trickle of volunteers for the army—a flow that Governor Andrew of Massachusetts bluntly told the President could not be increased so long as he persisted in fighting a war that would leave slavery intact.

Both Seward and Welles were startled by the President's proposal; hitherto Lincoln had been emphatic in rejecting any proposal to have the national government interfere with slavery. Both said they needed more time to consider the idea.

A week later the President discussed emancipation with the full Cabinet. His advisers did not immediately realize they were present at a historic occasion. As the President read the first draft of his proposed proclamation, the awkward phrasing showed that he was still trying to blend his earlier policy of gradual compensated emancipation with his new program for immediate abolition. On July 17, 1862, Congress had passed the Second Confiscation Act, which defined the rebels as traitors and ordered the confiscation of their property, including the freeing of their slaves. The President's proposal opened with an announcement that this act would go into effect in sixty days unless southerners "cease participating in, aiding, countenancing, or abetting the existing rebellion."

The President pledged to support pecuniary aid to any state that "may voluntarily adopt, gradual abolishment of slavery." Only at the end did he proclaim that "as a fit and necessary military measure"—not as a measure that was just or right—he would on January 1, 1863, declare "all persons held as slaves within any state . . . , wherein the constitutional authority of the United States shall not then be practically recognized, . . . forever free."

Reaction to the proclamation among Cabinet members was divided. Stanton and Bates urged "immediate promulgation."

Chase was cool, fearing an emancipation proclamation would unsettle the government's financial position. But he promised his support. Postmaster General Blair, who came in late, deprecated the proposed policy "on the ground that it would cost the Administration the fall elections." Secretary of the Interior Smith said nothing but was strongly opposed to emancipation; he was already thinking of resigning for lack of sympathy with the President. Seward, who had been thinking over the consequences of emancipation since his carriage ride with Lincoln and Welles, argued that issuing an emancipation proclamation after the Union's recent military reverses would "be viewed as the last measure of an exhausted government, a cry for help."

With his advisers divided, Lincoln reluctantly put the document aside, but he continued to argue the issue of emancipation in his own mind, and he took steps to prepare public opinion by publishing a reply to an intemperate editorial by Horace Greeley in the New York *Tribune*. To Greeley's complaint that he was "strangely and disastrously remiss" in not proclaiming emancipation, as required by the Second Confiscation Act, Lincoln replied: "My paramount object in this struggle *is* to save the Union, and is *not* either to save or to destroy slavery. If I could save the Union without freeing *any* slave I would do it, and if I could save it by freeing *all* the slaves I would do it; and if I could save it by freeing some and leaving others alone I would also do that. What I do about slavery, and the colored race, I do because I believe it helps to save the Union."

Widely published in northern newspapers, Lincoln's letter to Greeley received universal approval. Almost unnoted in the chorus of praise were the phrases in Lincoln's letter reaffirming his "oft-expressed *personal* wish that all men everywhere could be free." But he could not act on his personal convictions yet. The draft of his emancipation proclamation lay locked in a drawer. He needed a victory.

Victory did not come. Throughout July, McClellan's huge army sweltered on the Peninsula, its commander unable to take the offensive. Hope rested with John Pope's Army of Virginia,

now advancing south of Manassas. Lincoln was not discouraged when Thomas J. "Stonewall" Jackson checked Pope's advance at Cedar Mountain on August 9. Even after Lee—rightly judging that McClellan's army no longer posed a threat to Richmond—threw the strength of the full Army of Northern Virginia on Pope's forces in the Second Battle of Bull Run, the President remained optimistic. On August 30, while fighting still raged, he was relaxed enough to attend an informal supper at Stanton's house, where the Secretary assured him "that nothing but foul play could lose us this battle." Lincoln retired, expecting to receive news of victory in the morning. But at about eight in the evening he came to John Hay's room with the news he had just received: "Well, John, we are whipped again, I am afraid." Pope had been defeated and forced back to Centreville.

By the next morning Lincoln had absorbed the full extent of Pope's defeat. Once again Confederate troops threatened Washington. Once again every hospital bed in the capital was filled with the wounded. Pope denounced McClellan for failing to reinforce him and urged courts-martial for Generals Fitz-John Porter and William B. Franklin. While the generals bickered, the army, in disarray, retreated to the outskirts of the capital.

Exhausted, Lincoln fell into a deep depression. His new plan for a hard, decisive war against the Confederacy had failed. With its failure disappeared Lincoln's opportunity to issue a proclamation abolishing slavery—the cause of the war. Once again he returned to his bleak, fatalistic philosophy. "I am almost ready to say that God wills this contest, and wills that it shall not end yet," he wrote in an informal memorandum to himself.

Reluctantly the President returned to a defensive posture and looked once more to McClellan. By this time Lincoln harbored no illusions about the general; he ridiculed his "weak, whiney, vague, and incorrect despatches" and considered McClellan's failure to reinforce Pope unpardonable. Yet he knew that McClellan was a superb organizer and an efficient engineer, and nothing but the reinstatement of the general would restore the

shattered morale of the Army of the Potomac. "I must have McClellan to reorganize the army and bring it out of chaos," he concluded, adding, "McClellan has the army with him." Without consulting his advisers, the President asked McClellan to take command of the troops that were falling back into Washington and to defend the capital. "Mad as a March hare" over what he considered repeated snubs, McClellan accepted the assignment with reluctance.

Lincoln expected McClellan's role to be a temporary defensive one, but Lee, instead of resting after his victory at Second Bull Run, pushed across the Potomac and invaded Maryland. Halleck insisted that only McClellan could turn back the invasion. With great reluctance Lincoln restored McClellan to permanent command. To his Cabinet, whose opposition to the appointment was unanimous, Lincoln explained, "We must use what tools we have."

The Confederate invasion of Maryland, coming so close after Lee's smashing victory at Second Bull Run, fanned criticism of the President and his conduct of the war. Demands rose for a complete reorganization of the administration. Lincoln was urged to fire the "sinister" Stanton and Chase and to oust McClellan. Massachusetts governor Andrew summoned a conference of his fellow governors to try "if possible to save the Prest. from the infamy of ruining his country."

Caught in a cross fire, Lincoln had to reconsider his emancipation policy as well as his military strategy. The logical parallel to reinstating McClellan to fight a limited defensive war was a return to his inaugural pledge not to interfere with slavery within the states. But Lincoln was under increasing pressure to act. His call for additional volunteers had met a slow response, and several of the northern governors bluntly declared that they could not meet their quotas unless the President moved against slavery. He also had to take seriously insistent reports that European powers would act to recognize the Confederacy unless the government took a stand against slavery.

Always reluctant to be out in front of public opinion, Lincoln ultimately chose to leave the decision to a higher power. To a

visiting delegation of Chicago Christians, he pledged, "It is my earnest desire to know the will of Providence in this matter. And if I can learn what it is I will do it!" As he told the Cabinet later, he "made a vow, a covenant, that if God gave us the victory in the approaching battle, he [Lincoln] would consider it an indication of Divine will, and that it was his duty to move forward in the cause of emancipation."

On September 17 McClellan's victory at Antietam, though not the overwhelming success Lincoln had hoped for, gave the President the omen he had sought. Turning back to his long-delayed proclamation of emancipation, Lincoln, as he said, "fixed it up a little" over the weekend and called the Cabinet together on September 22 to hear it. The document he presented for Cabinet consideration lacked the memorable rhetoric of his most notable utterances. Totally absent was any reference to the barbarism of slavery, nor was morality invoked as a reason for striking it down. Instead, Lincoln cited as his authority for acting against slavery his powers as President and Commander in Chief, and the provisions of both the First and Second Confiscation acts. The President remained reluctant, even at this late hour, to offer unqualified freedom to the slaves. He promised to continue to press for compensated emancipation and for the colonization of African Americans outside the country. Yet, for all his hesitation, Lincoln announced at the end that on January 1, 1863, "all persons held as slaves" within any state or part of a state still in rebellion would be "then, thenceforward, and forever free."

The preliminary Emancipation Proclamation was officially issued on September 22, 1862, and in every major city throughout the North there were huge rallies to celebrate. Jubilant letters poured into the President's office. Three correspondents from Erie, Pennsylvania, wrote to say, "God bless you for the word you have spoken! All good men upon the earth will glorify you." A Baltimorean took an odd way of showing his enthusiasm by sending the President half a dozen hams.

No doubt such tributes were gratifying to a President who had hitherto received little public praise, but Lincoln was too

much of a realist to overestimate their importance. He noted that subscriptions to government securities had fallen off and volunteering had dropped. "The North responds to the proclamation sufficiently in breath," he told the Vice President, "but breath alone kills no rebels."

In the South, so far as the President could determine, the reaction to the proclamation was altogether negative. Jefferson Davis denounced it as an attempt to stir up servile insurrection and called it a further reason why the Confederacy must fight for its independence. Lincoln could learn little of its impact on African Americans in the South. Not until the war was over did they dare admit that they had learned of impending emancipation through the grapevine and were preparing to escape to freedom at the first opportunity.

Even in the North, once the initial euphoria had abated, the proclamation came under skeptical scrutiny. Abolitionists noted that Lincoln had only made a promise of freedom and that, apart from being conditional, his promise could be withdrawn before January 1. Many Democrats were bitterly opposed to the proclamation, and some border-state Unionists believed that it would undermine the loyalty of Maryland, Kentucky, and Missouri.

But much of the dissatisfaction with the Emancipation Proclamation was muted, because the President on September 24 issued another proclamation, which suspended the privilege of the writ of habeas corpus throughout the country and authorized the arbitrary arrest of any person "guilty of any disloyal practice, affording aid and comfort to Rebels against the authority of the United States."

To the President this seemed such a routine matter that he did not even mention it to the Cabinet. Stanton, as authorized by the Militia Act of July 17, 1862, had been issuing orders to suppress criticism of the newly instituted draft; enforced by petty officials all across the country, these regulations had resulted in hundreds of cases of violation of civil liberties. Lincoln's proclamation was simply designed to codify these War Department rules, but Democrats like Senator James A. Bayard

of Delaware read it to mean that the President was "declaring himself a Dictator."

The new proclamation had a chilling effect on public opinion. Editors feared they might be locked up if they voiced criticisms too freely. Even writers of private letters began to guard their language.

The voice of the people found expression in the 1862 fall elections for governors and Congressmen. Voters administered the President and his party a severe rebuff. In state after state that had gone Republican in 1860, Democrats made huge gains. Although the Republican Party retained control of the House of Representatives, its majority was drastically reduced.

Most blamed Republican defeats on what Lincoln called "the ill-success of the war." And that failure they attributed to the President. Bluntly a New Yorker charged that Lincoln's "weakness, irresolution, and want of moral courage," which had kept traitors like McClellan and Buell in command, were responsible for the "disgraceful" outcome of the elections. A Republican Congressman from Pittsburgh, Pennsylvania, told Lincoln candidly that since he insisted on retaining these generals, some Pennsylvania Republican leaders "would be glad to hear some morning that you had been found hanging from the post of a lamp at the door of the White House."

If Lincoln seriously feared violence, it was not from disappointed politicians but from the officers of the Army of the Potomac. Just before the Battle of Antietam, members of McClellan's staff were reported to have discussed "a plan to countermarch to Washington and intimidate the President," so that he would abandon his attempt to interfere with slavery and the war could be ended. Among the "Potomac Army clique," General Pope reported, there was open talk "of Lincoln's weakness and the necessity of replacing him by some stronger man."

After the battle, which McClellan considered "a masterpiece of [military] art," Lincoln determined to test the stories about disloyalty in McClellan's entourage and to learn whether McClellan was involved. Grilling Allan Pinkerton, McClellan's chief of intelligence, Lincoln asked a series of telling questions:

Why did the Union army not renew the attack the day after the battle? How were the Confederates able to slip back unhindered across the Potomac River? The information Lincoln wormed out of Pinkerton convinced the President that Antietam had not been a great victory but a lost opportunity, squandered by the high command of the Army of the Potomac.

On October 1 the President slipped out of Washington to visit the sites of the recent battles and to inspect the army. He returned to Washington confident that he could remove McClellan without causing a mutiny, but the President nevertheless delayed.

The breaking point came in late October, when McClellan informed Lincoln that the Army of the Potomac could not pursue Lee, because his cavalry horses were "absolutely broken down from fatigue and want of flesh." Lincoln's temper snapped. "Will you pardon me for asking what the horses of your army have done since the battle of Antietam that fatigue anything?" he shot back. Telling Secretary Chase that it was "inexpedient" to remove the general before the elections, the President bided his time, but on November 5 he directed Halleck to relieve McClellan and entrusted the command of the Army of the Potomac to Ambrose E. Burnside. At the same time, General Buell, who like McClellan was a practitioner of limited war, was relieved as head of the Army of the Ohio, and a few days later General W. S. Rosecrans took command of his troops, reorganized as the Army of the Cumberland.

Naming Rosecrans and Burnside was a shrewd political move. Burnside, in particular, was a happy choice. His commanding presence and even his elaborate side-whiskers gave an impression of manly competence. As a protégé of McClellan's, he would be less objectionable to that general's admirers than almost any other possible commander.

Whether the appointments of Burnside and Rosecrans were a shrewd military move was open to question. Burnside himself said he was not capable of leading the Army of the Potomac, and Rosecrans had hitherto displayed no talent for a large command. But for the moment most were willing to give the new

commanders a fair trial, and the President gained a little time to attend to the numerous other duties of his office.

He continued to work long hours, rising early, often after a sleepless night, to go to his White House office before his breakfast, which consisted of a cup of coffee and an egg. Returning to his desk after breakfast, he examined papers and signed commissions for another hour or so.

At ten o'clock his office hours for petitioners and visitors began. On most days, after a brief lunch—when he remembered to eat anything—he continued to receive petitioners in the afternoon. Though his secretaries fretted that he was wasting his time in these interviews, Lincoln felt he gained much from what he called his "public opinion baths." These random visits offered the President an opportunity to get some idea of how ordinary people felt about his administration.

Customarily, the President's open office hours were suspended on two afternoons each week for Cabinet meetings. Occasionally he went for a horseback ride in the afternoon, and from time to time Mrs. Lincoln, concerned about her husband's health, insisted that he come on a carriage ride with her, usually to visit the army camps around Washington or the soldiers' hospitals. Then, after dinner, Lincoln frequently returned to his White House office. Often it was near midnight before he got back to the family's living quarters.

During October and November much of Lincoln's attention had to be given to an uprising among the Sioux Indians of Minnesota. Bureaucratic delays in paying these Indians the annuities promised to them at the time they gave up most of their land left the Sioux desperate and almost starving. During the summer their agent tried to get food for them, but his supplier announced, "So far as I am concerned, if they are hungry let them eat grass or their own dung." In August some young Sioux men, raiding an Acton, Minnesota, farm for eggs, broke into the house and killed five white settlers. Quickly violence spread, and before the uprising could be quelled, more than 350 whites had been killed. It was the largest massacre of whites by Indians in American history.

Lincoln, almost wholly absorbed by Lee's invasion of Maryland, could devote little attention to the uprising. He dispatched General Pope, fresh from his defeat at Second Bull Run, to take charge of military operations against the Sioux. Predicting "a general Indian war all along the frontier, unless immediate steps are taken to put a stop to it," Pope announced, "It is my purpose utterly to exterminate the Sioux if I have the power to do so. . . . They are to be treated as maniacs or wild beasts." With the enthusiastic cooperation of Minnesota authorities, who saw an opportunity both to gain revenge and to secure additional Indian lands, Union troops broke the back of the rebellion, and a military commission began to try more than 1,500 Indians, including women and children, who had been captured.

As soon as news reached Washington, in mid-October, the President told Pope to stage no executions without his sanction. Lincoln admitted that he was poorly informed on Indian affairs. To learn more, he sent the assistant secretary of the interior to Minnesota and sought the advice of Episcopal bishop Henry B. Whipple, who advised that "a new policy of honesty was needed" for dealing with this "wronged and neglected race."

But whites who had been terrified during the uprising wanted vengeance against the Sioux. Republican governor Alexander Ramsey of Minnesota insisted that whites in his state "will not tolerate their presence in any number or in any condition."

On November 8 Lincoln received a list of 303 Sioux men whom the military commission had condemned to die. Promptly the President directed General Pope to send complete records of these convictions, indicating the more guilty and influential of the culprits. Pope responded that the people of Minnesota were so exasperated that if everyone on the list was not executed, it would be "nearly impossible to prevent the indiscriminate massacre of all the Indians."

But the President refused to be stampeded. He went through the record of each convicted man, seeking to identify those who had been guilty of the most atrocious crimes, especially rape and the murder of innocent farmers. He came up with a list of

thirty-nine names. Wiring the list to the military authorities, he warned the telegraph operator to be particularly careful, since even a slight spelling error might send the wrong man to his death.

On December 26 the thirty-eight men (one more man was pardoned at the last minute) were executed—the largest public execution in American history. Few praised Lincoln for reducing the list of condemned men. On the contrary, his clemency lighted a brief firestorm of protest in Minnesota, and considerable resentment remained against Lincoln and his administration, so that in the 1864 elections Republicans lost strength in the state.

The Indian uprising in Minnesota was but one of the many subjects that the President had to address in his annual message to Congress on the state of the Union in 1862. The message, due on December 1, offered Lincoln an opportunity to reformulate the basic goals of his administration. He knew it would be addressed to a highly critical audience. Congressional Democrats, cheered by the outcome of the recent elections, could be counted upon to be more partisan than usual. Many Republicans were now lame ducks, and their influence was diminished.

Much of Lincoln's message was entirely routine, summarizing the work of the departments, discussing foreign relations, financial affairs, and the Sioux uprising. The message came alive only when Lincoln reached the topic that really interested him: compensated emancipation.

Convinced that slavery was doomed, the President believed the main task now was to plan for a transition from slavery to freedom. He proposed three amendments to the Constitution. The first authorized the payment of United States bonds to any state that abolished slavery by January 1, 1900; the second guaranteed the freedom of all slaves who "enjoyed actual freedom by the chances of the war" but authorized payment to masters who had not been disloyal; and the third authorized congressional appropriations for "colonizing free colored per-

sons, with their own consent, at any place or places without the United States."

Lincoln argued for his plan with a passion and eloquence not shown in his public addresses since the Lincoln-Douglas debates. "Fellow citizens," he concluded, "we cannot escape history. We of this Congress and this administration, will be remembered in spite of ourselves." In phrases that had a Shakespearean cadence the President reminded the legislators, "In *giving* freedom to the *slave,* we *assure* freedom to the *free*—honorable alike in what we give, and what we preserve." Now was the time for decision. "We shall nobly save, or meanly lose, the last best, hope of earth."

Any chance for a speedy restoration of the Union was lost on December 13. General Burnside, against the advice of the President, threw the Army of the Potomac across the Rappahannock into Fredericksburg. Then he ordered his soldiers to advance uphill toward Marye's Heights, where the Confederates lay waiting for them. By the end of the day, one in ten of Burnside's soldiers was a casualty—dead, wounded, or missing; the Confederate losses were less than half as great. It was the worst defeat in the history of the American army.

As news of Fredericksburg trickled out, a wave of anger swept the North. A few critics blamed the President personally. But most were willing to admit Lincoln's good intentions, though they doubted his will and looked for ways to give the administration backbone. Discontent centered on the want of harmony in the Cabinet. Welles and Chase distrusted Seward because they believed he failed to understand the seriousness of the nation's crisis. Stanton's irascible, secretive manner prevented other Cabinet members from becoming his friends. Welles, wearing a massive wig, was something of a figure of fun to his colleagues. Nearly everybody agreed that Caleb B. Smith, the Secretary of the Interior, was of no consequence; his resignation was eagerly awaited.

Lincoln was not only aware of this dissonance; he was prepared to tolerate, and perhaps even to encourage, creative friction among his advisers. After Fredericksburg, as criticism of

the Cabinet increased, both Secretary of State Seward and Treasury Secretary Chase sent letters of resignation to the President. Lincoln declined to accept either. The two men balanced each other, he told one Senator. Lincoln understood that the irritable clashes among the Cabinet officers reflected differences in personality, not ideology; unconsciously they were rivals for the esteem and affection of the President. It was a problem that Lincoln, like other men of enormous personal magnetism, had to live with throughout his life.

TWELVE

What Will the Country Say!

Throngs attended the White House reception on New Year's Day of 1863. Lincoln shook hands with everyone, then passed the guests along to Mrs. Lincoln, who wore a dress of rich velvet, with lozenge trimming at the waist; it was black, since she was still in mourning for Willie. Not until after noon could Lincoln escape upstairs to his office, where Seward and his son Frederick, the assistant secretary of state, brought him the duly engrossed copy of the final proclamation of emancipation. Excepting Tennessee and portions of other southern states that were already under the control of Union armies, it declared that all slaves in the states or portions of states still in rebellion "are, and henceforward shall be free." Grasping the pen firmly, Lincoln said, "I never, in my life, felt more certain that I was doing right, than I do in signing this paper."

The year began with little good news from the armies. To be sure, in eastern Tennessee, Rosecrans's army held its own against Bragg's in the protracted and costly Battle of Stones River (December 30–January 2). But when the Confederates withdrew, Union forces did not follow. For the rest of the winter Rosecrans remained immobile at Murfreesboro, ignoring the President's prompting to advance against Chattanooga. Rosecrans found the roads impassable and his lines of communication with Nashville and Louisville too tenuous.

Farther west, the outlook for the Union forces was even bleaker. On January 1 the federal garrison at Galveston, Texas, surrendered to attacking Confederates. In Louisiana, General Benjamin F. Butler proved so rapacious that the President had to replace him. Most serious of all was Grant's failure to capture Vicksburg, Mississippi. After an unsuccessful attempt to proceed overland through central Mississippi, Grant entrusted the offensive to William Tecumseh Sherman, who led his troops on December 29 in a disastrous assault on the Chickasaw Bluffs defending Vicksburg that was reminiscent, on a smaller scale, of Burnside's fiasco at Fredericksburg.

Most troubling of all was the situation of the Army of the Potomac, demoralized almost to the point of mutiny. When Burnside began preparing another assault on the impregnable Confederate defenses at Fredericksburg, discontent bubbled over. Anticipating another disaster, Generals John Newton and John Cochrane made a quick trip to Washington to alert the President of the danger.

Burnside, having lost the confidence of his troops, offered to resign. But Lincoln decided to give the general one more chance. He approved Burnside's plan to cross the Rappahannock west of Fredericksburg, where the general hoped to flank Lee's army.

On January 19 the Army of the Potomac lumbered out of camp on a mission that most of Burnside's division commanders felt was doomed. The weather reinforced their objections. As heavy rain turned to sleet, the army bogged down, and after three days Burnside called off what reporters scornfully called the Mud March.

Back in camp, Burnside blamed the failure on the disloyalty of his subordinates. He drafted an order dismissing four of his major generals and relieving four others of their commands. Taking the order to Washington, he told Lincoln he could not continue in command unless the order was approved. "I think you are right," Lincoln said, but he reserved a decision until he could talk with Stanton and Halleck. The next morning Lincoln told Burnside that he was going to be replaced as commander of the Army of the Potomac.

The President had difficulty choosing a successor. Rather uncertainly he turned to Joseph Hooker. The general had some decided negatives. He was known to be a hard drinker. He had been outspoken almost to the point of insubordination in his criticisms of Burnside, and he let it be known that he viewed the President and the government at Washington as "imbecile and played out." But the handsome florid-faced general had performed valiantly in major engagements of the Peninsula campaign and at Antietam, where he had been wounded, and his aggressive spirit earned him the sobriquet "Fighting Joe." Lincoln decided to take a chance on him.

Although the appointment of Hooker was generally well received, Democrats in Congress, heartened by their successes in the recent fall elections, had launched a broad assault upon the Lincoln administration. Peace Democrat Clement L. Vallandigham denounced Lincoln's effort to restore the Union by war as an "utter, disastrous, and most bloody failure" and claimed that the President by "repeated and persistent arbitrary arrests, the suspension of *habeas corpus,* the violation of freedom of the mails, and all the other multiplied wrongs and outrages upon public liberty and private right" had converted the United States into "one of the worst despotisms on earth."

Vallandigham did not speak for the entire Democratic Party. War Democrats, who consistently supported Lincoln's efforts to subdue the Confederacy, sustained his administration in all measures they considered constitutional. But many others, weary of the bloodshed, were ready to end the war through negotiation and compromise.

Opposition to the President was also mounting within his own party. Congressmen from the border states and southern parts of the Northwest blamed Republican election losses on the President's crusade against slavery. Radical Republicans from New England, parts of the Middle Atlantic States, and northern districts of the Northwest attributed defeat to Lincoln's slowness in moving against slavery.

Despite these bitter intraparty quarrels, Republicans in the Thirty-seventh Congress enacted an impressive body of legisla-

tion. They passed a conscription law—one with teeth. The new law took the recruiting of soldiers out of the hands of state officials and made able-bodied males between the ages of twenty and forty-five subject to call into national service. Republicans also enacted the National Banking Act, which established a national currency and created a network of national banks. In previous sessions this Congress had passed the Homestead Act, enacted an internal revenue law, adopted tariff legislation, chartered a transcontinental railroad, established a system of land-grant colleges, and created the Department of Agriculture—all at the same time it dealt with the weighty issues of civil war.

Battered from all sides, Lincoln grew despondent. In February a close observer, noting that "his hand trembled . . . and he looked worn and haggard," felt the President was "growing feeble." When the Massachusetts abolitionist Wendell Phillips spoke of Lincoln's chances for a second term, the President replied, "Oh, Mr. Phillips, I have ceased to have any personal feeling or expectation in that matter,—so abused and borne upon as I have been."

Constantly surrounded by bureaucrats, job applicants, and sightseers, the President was the loneliest man in Washington. From Mary he no longer received much emotional support. Still dressed in mourning, she grieved for Willie. Moving through the White House like a cloud of doom, she consorted with spiritualists, who she thought put her in communication with her son's spirit during White House séances. Lincoln attended one, but he was not convinced. Soon Mary began to feel that she herself could conjure up the spirits of her dead sons. "Willie lives," she told her half sister. "He comes to me every night and stands at the foot of the bed with the same sweet smile he always has had. . . . Little Eddie is sometimes with him."

Lincoln, protective of his wife's fragile mental health, did not burden her with his problems. He drew comfort from Tad, to whom he became even more attached after the death of Willie. Bright and affectionate, Tad was also wholly undisciplined. The nine-year-old boy still could not dress himself, and despite the

efforts of tutors, he could neither read nor write. Because of a speech defect, the boy was hard to understand, but his father always could—and he knew how frustrated the child became when he could not express himself. Consequently, even when Tad burst in on Cabinet meetings, jabbering something to "Papa-day," as he called his father (perhaps he meant to say something like Papa-dear), the President interrupted everything to give the lad his full attention. In turn, Tad adored his father, and he would often hang around the President's office until late at night, sometimes falling asleep on one of the couches or chairs.

For more mature companionship Lincoln did not look to his oldest son, Robert. He was proud of Robert, who was at Harvard College most of the year. But Robert felt awkward around his father, and the two never seemed to find anything to say to each other.

In his two secretaries Lincoln found the sons that Robert could never be. Working side by side for long hours with John G. Nicolay and John Hay, Lincoln came to know these young men extremely well and to enjoy their company. Because they lived in the White House, he got in the habit of dropping in on them at night to chat or to read them an amusing poem. He valued their absolute loyalty. They, in turn, resented anyone else who tried to get close to him. A fierce rivalry developed between the two secretaries and Mrs. Lincoln. Ostensibly their clashes had to do with the management and the refurbishing of the White House, but at base they stemmed from jealousy over the President's affections.

Aware of his unpopularity during these early months of 1863, Lincoln thought he understood the cause. He told a group of New England abolitionists, "Defeat and failure in the field make everything seem wrong."

During this time, when his generals and admirals were concerting plans for a new assault upon the Confederacy, he did what he could to ensure success. Manpower posed a real problem. There had been severe losses in a contest that had now

lasted nearly two years. The terms for which many regiments had enlisted were about to expire, and soldiers wanted to go home. There were almost no new volunteers. It would be months before the new conscription act brought in recruits.

Reluctantly, and after great hesitation, Lincoln turned to the one source of manpower he had vowed he could never use: African Americans. Lincoln's resistance to using Negro troops had persisted even after he issued his preliminary Emancipation Proclamation. That document was designed to persuade Confederates to return to the Union or lose their slaves; it would have been illogical at the same time to announce that those slaves who were successful in escaping their masters would be organized into regiments of the Union army.

But the movement to enlist black troops had become irresistible. In his final Emancipation Proclamation, issued on New Year's Day, Lincoln announced that former slaves would be received into the armed forces—though as yet he limited their role "to garrison and defend forts, positions, stations, and other places, and to man vessels of all sorts." At the same time, he abandoned the idea of colonizing blacks outside the United States. Henceforth Lincoln recognized that blacks were to make their future as citizens of the United States.

Eventually Lincoln began actively urging his commanders to employ black troops. "The colored population is the great *available* and yet *unavailed* of, force for restoring the Union," he reminded Andrew Johnson, whom he had appointed military governor of Tennessee, and he urged Johnson to take the lead in raising such a force.

Along with supplying troops, Lincoln made it his responsibility to see that the armies had the best and most up-to-date arms. Always interested in machinery and gadgets, he accumulated models of proposed new weapons—a cuirass of polished blue steel, a grenade that served as a presidential paperweight, a brass cannon. Often he went to the Washington Navy Yard to watch new weapons being tested.

He took great interest, for instance, in a repeating rifle of a French inventor. Accompanied by Seward, Stanton, and a cor-

respondent of the New York *Tribune,* the President spent more than two hours watching the machine gun shoot at targets on the Potomac.

After Congress adjourned in March, Lincoln found himself, unexpectedly, with time on his hands. There were no Senators to be soothed, no Representatives to be placated, no bills to be signed.

That moment of tranquillity signified that plans for a great spring assault on the Confederacy were finally in place. A huge armada of ironclad monitors and conventional warships was being prepared to attack Charleston, the heart of the Confederacy. In the West, Generals Grant and Sherman were readying to capture Vicksburg, the last major link between the eastern states of the Confederacy and the trans-Mississippi region. From New Orleans, General N. P. Banks was to push north to join forces with Grant. In eastern Tennessee, Rosecrans was poised for a drive against Chattanooga, and in the East, Hooker's vast Army of the Potomac was to advance against Lee's Army of Northern Virginia.

In early April, Lincoln decided to visit Hooker's headquarters. Accompanied by Mrs. Lincoln and Tad, together with Attorney General Bates; Dr. Anson G. Henry, Lincoln's old friend from Springfield; Noah Brooks, the Washington correspondent of the Sacramento *Union;* and a few others, Lincoln sailed down the Potomac on the unarmed *Carrie Martin.* After being delayed by a snowstorm, he was taken by train to Hooker's headquarters, where he reviewed the entire cavalry, which gave him a hearty welcome. Tad was the star of the occasion. Booted and spurred, he galloped along on a pony, clinging tenaciously to the saddle with his gray cloak billowing behind him.

During the next three days, in addition to visiting soldiers in the army hospital, the President reviewed more than 60,000 of the troops under Hooker's command. Though exhausting, the reviews were impressive, and Lincoln did not fail to notice the troops' high state of readiness. Hooker, for all his bluster and bragging, proved an expert at organization, and the Army of the

Potomac was in better physical shape and had higher morale than at any time in its history.

But Lincoln was troubled. As he heard plans of battle discussed, he feared Hooker might follow his predecessors in throwing in his forces a few at a time. Not wishing to assume personal responsibility for planning a battle, the President, just before leaving, told Hooker and General Darius N. Couch, "I want to impress upon you two gentlemen in your next fight . . . put in all of your men."

Over the next few weeks Lincoln's forebodings seemed justified. On April 7, nine ironclads steamed into Charleston harbor and attacked Fort Sumter. By the end of the day, five ironclads had been badly damaged, and the fleet was forced to withdraw.

Equally disappointing were the operations on the Mississippi. After Grant's army spent much of the spring digging a canal on the Louisiana side of the river in the hope of bypassing Vicksburg, the banks caved in and the whole enterprise was abandoned. Then Grant, telling no one, marched his troops down the west side of the river, crossed into Mississippi, and disappeared. General Banks, after a delay so long that his movement was of no assistance to Grant, moved up the Mississippi and staged an ill-timed and bloody assault on Port Hudson, Louisiana. In Tennessee, Rosecrans offered only inaction.

Lincoln watched most closely the Army of the Potomac, where, on April 28, Hooker began moving 70,000 of his men across the Rappahannock River and threatened to crush Lee's flank. The President had asked to be informed of Hooker's strategy before the battle, and he wanted frequent dispatches once the fighting began. His concern was warranted. Hooker, after a promising start, paused at Chancellorsville and failed to push his offensive. Lee took advantage of his hesitation, boldly divided his much smaller army, and sent Stonewall Jackson by a circuitous route to fall on Hooker's right. The Confederates gained another major victory, and Hooker was forced to retreat.

News of the Battle of Chancellorsville was slow in reaching Washington. Highly optimistic predictions after the first day's fighting withered as more and more bad news came in. In

midafternoon of May 6, holding a telegram, Lincoln came into the room in the White House where Dr. Henry, his physician, and Noah Brooks were talking. Lincoln's face was ashen, and his voice trembled as he said to his guests, "Read it—news from the Army." At no other time, Brooks thought, did the President appear "so broken, so dispirited, and so ghostlike." As Brooks and Dr. Henry read of Hooker's defeat, Lincoln paced up and down the room, exclaiming, "My God! My God! What will the country say! What will the country say!"

THIRTEEN

A New Birth of Freedom

The weeks after the Battle of Chancellorsville were among the most depressing of Lincoln's presidency. Everything had gone wrong—at Charleston, at Vicksburg, in eastern Tennessee, and especially in northern Virginia. Failure of Union arms led to renewed protests against the war. Controversy over the suppression of civil liberties mounted. So did complaints about the incompetence of Lincoln's administration. The downward spiral of events convinced the reluctant President that he had to exert more active leadership, both in military operations and in the shaping of public opinion.

Immediately after Chancellorsville the President set about determining responsibility for the disaster, and on May 6, accompanied by Halleck, his general in chief, he went to the headquarters of the Army of the Potomac at Falmouth, Virginia, where he was pleased to discover that the "troops are none the worse for the campaign." Less encouraging was the mental state of their commander. Hooker, as always, was "cool, clear and satisfied," unwilling to recognize his mistakes.

In deciding on the general's future, Lincoln was torn. He genuinely liked Hooker, who had shown himself candid and brave. He also learned that the general had been on the verge of victory until he was stunned by a falling beam when a Confederate cannonball hit his headquarters. On leaving Falmouth, Lincoln

announced to a newspaper correspondent that "his confidence in Gen. Hooker and his army [was] unshaken." When another reporter asked whether he intended to replace the general, he replied that since he had tried McClellan "a number of times, he saw no reason why he should not try General Hooker twice." He was determined, though, to keep closer personal control of the general's operations. "What next?" he asked Hooker. Did the general have a new movement in mind?

Hooker had a plan—a hopelessly wrongheaded one. Learning that Lee was moving north of the Rappahannock, he proposed to cross that river and attack the Confederate rearguard at Fredericksburg. Promptly Lincoln warned, "I would not take any risk of being entangled upon the river, like an ox jumped half over a fence, and liable to be torn by dogs, front and rear, without a fair chance to gore one way or kick the other." But Hooker seemed not to learn. Within a week he suggested that if Lee invaded the North, the Army of the Potomac should march south and attack Richmond. Lincoln reminded him of the dangers of this harebrained scheme and pointed out a basic truth so many of his commanders seemed unable to grasp: "*Lee's* Army, and not *Richmond,* is your true objective point."

Certainly Hooker was obtuse, but the President himself was in part responsible for the general's failure. Though Lincoln had excellent strategic sense, which improved as the war progressed, he knew he was not competent to draft proper orders for a military campaign. He also knew how much military men objected to what they regarded as meddling by a civilian. Consequently, he advanced ideas hesitantly. Expressing his wishes as suggestions rather than commands, he relied on General Halleck to translate his ideas into orders the armies could follow. But the system could not work, because Halleck was unwilling to take the initiative or assume responsibility.

As the Confederates swept through western Maryland, many in Washington panicked. Rumor had it that a steamer was anchored in the Potomac, ready to take the President and his Cabinet to safety when the rebels arrived. But Lincoln was in excellent spirits, convinced that Lee's invasion offered a chance

to bag the entire Confederate army. The Army of the Potomac, facing the rebels on Union soil, could not "help beating them, if we have the man," Lincoln told Welles, but he worried that "Hooker may commit the same fault as McClellan and lose his chance."

That remark revealed his doubts about Hooker. Like everybody else, he had heard reports that the general was drinking too much. He knew, too, that there had been much grumbling against Hooker since the defeat at Chancellorsville. But what eventually turned the President against the general was Hooker's obdurate failure to follow directions.

As Lee moved across the Potomac, Hooker closely followed, offering an effective screen for Washington and Baltimore and keeping his troops in readiness for a major combat on northern soil. But as usual, he resisted accepting suggestions or orders. Lincoln, who saw in the Confederate invasion "the best opportunity we have had since the war began," wanted to maintain a sizable garrison at Harpers Ferry, where, to the left and the rear of the Confederate advance, it might compel Lee to divide his forces. Then Hooker could deliver a devastating defeat to Lee's army. But Hooker believed in the military doctrine of concentration of force and insisted that Harpers Ferry be abandoned. When Halleck ordered him to sustain that garrison, Hooker resigned—assuming, no doubt, that on the eve of a major battle his resignation would be rejected.

It was not. On June 28 Lincoln replaced Hooker with George Gordon Meade, an experienced corps commander who had been in every major engagement since the First Battle of Bull Run. Tall, thin, and bespectacled, Meade looked, a Massachusetts soldier reported, like "a good sort of a family doctor." But he was highly professional, and he had the respect, if not the affection, of his men.

As Meade took command and followed Lee into Pennsylvania, Lincoln also kept a close eye on Grant's campaign against Vicksburg. The President had never tried to direct Grant's strategy; the distances were too great. But he thought Grant should bypass Vicksburg, go south and join forces with

General Banks, who was advancing up the Mississippi River from Louisiana. Instead, Grant plunged into the interior of Mississippi, defeated Confederate forces in a series of engagements, and pushed John C. Pemberton's army back into Vicksburg. During much of this campaign Grant told no one of his plans and seemed simply to have disappeared.

Finally, as news slowly filtered in, Lincoln began to get a better idea of Grant's campaign, and by the time the Union army put the Confederates under siege in Vicksburg, he could understand both the boldness and the skill of his general. "Whether Gen. Grant shall or shall not consummate the capture of Vicksburg," he wrote a complainer on May 26, "his campaign is one of the most brilliant in the world."

Under the enormous strain of worry about two armies poised for decisive battle, the President's health began to suffer. A visitor found that Lincoln's face told a story of anxiety and weariness. One night he had a nightmare about Tad, who had accompanied his mother on a trip to Philadelphia. His "ugly dream" featured the pistol he permitted the boy to have—"big enough to snap caps—but no cartridges or powder"—and he wired Mary, "Think you better put 'Tad's' pistol away."

Then, on July 4, came the news that Lincoln had so long awaited. A great and bloody battle had been fought during the three previous days at Gettysburg, Pennsylvania. Though details were lacking, it appeared that Lee had been defeated and was retreating. Three days later Gideon Welles, Secretary of the Navy, received a dispatch from Admiral David Dixon Porter announcing the fall of Vicksburg, and he rushed to the White House with the news. Beaming with joy, Lincoln caught Welles's hand and, throwing his arm around him, exclaimed, "What can we do for the Secretary of the Navy for this glorious intelligence? . . . I cannot, in words, tell you my joy over this result. It is great, Mr. Welles, it is great!"

For a few days in early July it seemed that the end of the war was at hand. With the fall of Vicksburg, the Mississippi, from Cairo to New Orleans, was once more in Union hands. "The Father of Waters again goes unvexed to the sea," wrote a eu-

phoric Lincoln. Charleston was slowly being battered to rubble by the Union fleet. And in the East, Meade had to fight just one more battle to destroy Lee's army, which was trapped between the advancing Army of the Potomac and the Potomac River, swollen with summer rains.

But Meade did not advance, and Lee escaped into Virginia. Never was Lincoln so disappointed and so furious. "If I had gone up there, I could have whipped them myself," he exclaimed. He took special offense at a dispatch of Meade's praising his army for "driving the invader from our soil." "The whole country is our soil," Lincoln insisted. From the depths of his unhappiness he wrote a bitter letter to Meade. Then, characteristically, he did not sign or send the letter. As he cooled down, he came to recognize that he was expecting too much of Meade. At the time the Battle of Gettysburg began, Meade had been in command for only four days. His army had suffered enormous losses, and Meade himself was exhausted. It was asking too much of him to attack Robert E. Lee.

Recovering his equanimity, Lincoln was soon speaking of Meade "as a brave and skillful officer, responsible for the success at Gettysburg."

In the next few months Lincoln had need of equanimity. On July 2 Mary Lincoln had a carriage accident while returning to the White House from the presidential cottage at the Soldiers' Home, an elevated spot three miles from the capital, where the Lincolns sought relief from the oppressive Washington heat. Someone, probably in the hope of injuring the President, had unscrewed the bolts to the driver's seat in her carriage, and when it became detached, Mary was thrown out and hit her head on a rock. For three weeks she required round-the-clock nursing. After this accident Mary's headaches, of which she had long complained, became more frequent.

Lincoln could not spend much time at his wife's bedside, because on July 13 draft riots erupted in New York City. Attempts to enforce the conscription act led to resistance in many parts of the country, but only in New York was there a full-scale in-

surrection. For three days working-class mobs roamed the streets, looting and burning. More than 100 people were killed before Union troops, fresh from the Battle of Gettysburg, arrived to restore order.

The rest of the summer was a relatively tranquil time for the President. Military affairs were under control, with capable professionals like Meade and Grant in command of the armies. Lincoln had time to assess his administration, and on the whole he was pleased with what he had accomplished. Increasingly self-confident, he relied less and less on the advice of his Cabinet officers.

Then, at the end of September, there was more bad news from the military. Rosecrans, pushing on beyond Chattanooga, had been routed in the costly Battle of Chickamauga, where only the rocklike firmness of General George H. Thomas saved the Army of the Cumberland from disaster. Afterward, while the Union army huddled in the city of Chattanooga, virtually cut off from supplies, Rosecrans behaved, Lincoln said, "like a duck hit on the head."

So grave was the situation that Stanton called a midnight council. Rosecrans, he announced, could hold out for ten days, but needed reinforcements. Stanton proposed to detach 30,000 men from the Army of the Potomac, transporting them by rail from Virginia, across the Appalachian Mountains, and south through Kentucky and Tennessee; he promised they would come to Rosecrans's rescue in five days.

Lincoln, who had seen so many brilliant military stratagems fail, was pessimistic. But to his surprise and delight Stanton's plan worked. Making carefully coordinated use of railroads, the War Department transported about 20,000 men and 3,000 horses and mules 1,159 miles in seven to nine days.

Shortly afterward Lincoln put Grant in charge of the new Division of the Mississippi and replaced Rosecrans with Thomas. By the end of October, Grant relieved Chattanooga, and the Union armies prepared to drive the Confederate troops back into Georgia.

Politically the news of the rescue could not have come at a better time. Republicans, buoyed by this military success, reported numerous victories in the critical 1863 elections, and Lincoln enjoyed a burst of unaccustomed popularity. The Chicago *Tribune*, so often critical of the President and his administration, now called him "the most popular man in the United States."

Apart from the campaigns around Chattanooga, there was a lull in the war during the fall of 1863. In this period the President's thoughts turned to explaining the significance of the war to the American people. Lincoln had been brooding over this idea for some time. Shortly after the news of Gettysburg and Vicksburg reached Washington, he responded to a group of serenaders by pointing out how appropriate it was that the Union victory occurred on the nation's birthday. What better way was there to celebrate the day. "How long ago is it?—eighty odd years—since on the Fourth of July for the first time in the history of the world a nation by its representatives, assembled and declared as a self-evident truth that 'all men are created equal.'" The root of the rebellion was "an effort to overthrow the principle," and now the rebellion had suffered major defeats on the anniversary of the Declaration of Independence. This was a "glorious theme," said the President, but he was not yet prepared to make a speech on the subject.

The need for a broad statement on the significance of the war began to seem more pressing as northerners, convinced by now that the end of the war was in sight, began debating the terms on which the southern states should be restored to the Union. On June 17, even before these victories at Vicksburg and Gettysburg, antiwar forces had held a huge rally in Springfield and demanded "the restoration of the Union as it was."

Lincoln believed such a demand, echoed by anti-administration gatherings all over the North, rested on wrongheaded assumptions. A call for the restoration of the Union as it was before the war meant abandonment of the Emancipation

Proclamation and other measures against slavery. It also meant an end to the recruitment of blacks into Union armies just when Negro soldiers were proving their valor at Port Hudson on the Mississippi and in Charleston harbor.

Eager to put his views before the public, Lincoln welcomed an invitation to attend the dedication of the cemetery at Gettysburg, where the thousands of men killed in that battle, imperfectly identified and hastily buried, were being reinterred. The orator for the occasion, Edward Everett—the former president of Harvard College, former United States Senator, and former Secretary of State—could be counted on to give an extended speech. The President was asked by David Wills and the other members of the Gettysburg Cemetery Commission to make "a few appropriate remarks."

Using White House stationery, Lincoln began writing out the address he would make on November 19. By this time he had his facts straight. No longer did he refer to the Declaration of Independence as having been written "about eighty years ago"; now he wrote without hesitation, "Four score and seven years ago." For the most part, the writing went smoothly and without interruption—a sure sign that he had carefully reflected on his words. He had trouble with the ending, but he had the whole of it in his mind before he left the White House on November 18, and needed only a few quiet minutes to write it out.

His purpose in the address was to drive home his belief that the United States was not just a political union, but a nation—a word he used five times. Its origins antedated the 1789 Constitution. It stemmed from 1776. It was with the Declaration of Independence that "our fathers brought forth, upon this continent, a new nation, conceived in Liberty, and dedicated to the proposition that all men are created equal." This was, of course, not a new idea for Lincoln, nor was it an original contribution to American political discourse. In invoking the Declaration now, Lincoln was reminding his listeners—and, beyond them, the thousands who would read his words—that theirs was a nation pledged not merely to constitutional liberty but to human equality. In language that

evoked images of generation and birth, he stressed the role of the Declaration in the origins of the nation, which had been "conceived in Liberty" and "brought forth" by the attending founding fathers. Now the sacrifices of "the brave men, living and dead, who struggled here" on the battlefield at Gettysburg had renewed the power of the Declaration. "The last full measure of devotion" that they gave made it possible to "highly resolve that these dead shall not have died in vain" and to pledge "that this nation, under God, shall have a new birth of freedom."

Compressed into 272 words, Lincoln's message was at once a defense of his administration, an explanation why the war had to continue, and a pledge that because of these exertions "government of the people, by the people, for the people, shall not perish from the earth."

For a while it seemed that Lincoln might not be able to attend the dedication ceremonies. On the day he was scheduled to go to Gettysburg, Tad was ill. Mary, recalling the deaths of her other boys, became hysterical at the thought that her husband would leave her at such a time. But so important was the message he intended to deliver that he brushed aside his wife's pleas. About noon he left Washington on a special train, accompanied by, among others, Seward, Blair, Secretary of the Interior John P. Usher, Nicolay, Hay, and a military escort. Arriving about five o'clock at Gettysburg, Lincoln was relieved to receive a telegram from Stanton: MRS. LINCOLN INFORMED ME THAT YOUR SON IS BETTER THIS EVENING.

That night Lincoln worked for a while in his room at David Wills's impressive mansion, preparing a clean copy of his remarks. On the morning of the nineteenth, after giving the final touches to his address, Lincoln appeared outside Wills's house dressed in a new black suit. After he mounted his horse, which some observers thought too small for so tall a man, there was a considerable delay, and the President spent the time shaking hands with well-wishers. Finally, the procession began. With four military bands providing music, the President, along with his three Cabinet officers, representatives of the military, and

members of the Cemetery Commission, made a slow march of about three quarters of a mile to the burial ground.

At the speakers' platform Lincoln waited for Edward Everett to appear. After an interminable invocation by the chaplain of the House of Representatives, the Massachusetts orator began his two-hour address. For the most part, it was an exposition of what had happened during those fiercely hot three days in July when the nation's life hung in the balance. It was a moving address, and according to one observer, Everett left "his audience in tears many times during his masterly effort."

Then, after an unmemorable hymn hastily composed for the occasion, Ward Hill Lamon, the grand marshal of the event, introduced the President. With his high, penetrating voice Lincoln began. Many in the crowd, a little restive after Everett's long oration, expected another long speech. Most thought Lincoln was only getting under way when he pledged "that this government of the people, by the people, for the people, shall not perish from the earth" and sat down.

Immediately afterward Lincoln may have felt that his Gettysburg address was not successful. But quickly it became clear that his words had reached the general public. Although most newspapers devoted most of their attention to Everett's oration, praise for the President's address mounted. "The dedicatory remarks by President Lincoln will live among the annals of man," announced the Chicago *Tribune* in one of the earliest expressions of appreciation. The Washington *Chronicle* said that Lincoln's address, "though short, glittered with gems."

The impact of the speech could be measured in the number of times the President was asked for autographed copies. There are at least five copies in Lincoln's own handwriting—more than for any other document he wrote—and doubtless others have been lost.

Another measure of its significance was the criticism opponents leveled against it. Wilbur F. Storey of the ultra-Democratic Chicago *Times* recognized that in invoking the Declaration of Independence, Lincoln was announcing a new objective in the war. Calling the address "a perversion of his-

tory," Storey insisted that the officers and men who gave their lives at Gettysburg died "to uphold this constitution, and the Union created by it," not to "dedicate the nation to 'the proposition that all men are created equal.'" The bitterness of these protests was evidence that Lincoln had succeeded in broadening the aims of the war from Union to Equality and Union.

FOURTEEN

The Greatest Question Ever Presented to Practical Statesmanship

Lincoln returned from Gettysburg with a fever, and his doctor put him to bed, diagnosing varioloid, a mild variant of smallpox. For the next three weeks he remained under quarantine in the White House. His illness, he joked, gave him an answer to the incessant demands of office seekers. "Now," he is supposed to have said, "I have something I can give to everyone."

In the fall of 1863 Lincoln occupied a commanding political position. His popular following was strong, and in military affairs, too, things were looking up. In November decisive Union victories of Grant, Sherman, and George H. Thomas at Lookout Mountain and Missionary Ridge pushed the rebels out of most of Tennessee and opened the way for a drive into Georgia.

As the collapse of the Confederacy seemed imminent, pressure grew for a clear statement of how to restore the southern states to the Union. Lincoln was aware of three possible plans. Democrats called for the President to withdraw the Emancipation Proclamation and offer a general amnesty to the rebels. The southern states, which had never legally been out of the Union, would simply send new Congressmen to Washington and the war would be over. Conservative Republicans made Liberty as well as Union their war aim. Apart from insisting on the Emancipation Proclamation, they favored generous terms for the conquered South. Seward let it be known that he hoped

that no conditions beyond the emancipation of the slaves would be imposed on the returning rebels. Radical Republicans sought to add Equality as a third war aim. Most of them called for a drastic reorganization of southern social and economic life before the rebellious states could be readmitted. Some favored treating the South as a conquered province, and called for dividing southern lands "among patriot soldiers, poor whites, and freedmen."

In his sickroom the President began working on an annual message to Congress that would avoid extreme positions. He secured statistics on the army from War Secretary Stanton and sought suggestions from Treasury Secretary Chase about his reconstruction program. The first half of the message was simply a pasting together of paragraphs submitted by department heads. And the message, as several newspapers remarked, was less "Lincolnian" than his earlier messages, and it missed several opportunities. The President did not point to the significance of the first national day of thanksgiving, which, at the urging of Sarah Josepha Hale, editor of *Godey's Lady's Book,* he had proclaimed for the last Thursday in November. Nor did he note the symbolic significance of the completion that year of the Capitol building despite the strains of war. He also failed to use the occasion to stress the growing importance of blacks in the Union war effort.

Only at the end of the message did Lincoln's distinctive voice emerge. Announcing a proclamation of amnesty and reconstruction, the President offered "full pardon . . . with restoration of all rights of property, except as to slaves," to all rebels, except high-ranking Confederate officials, who would take an oath of loyalty to the Constitution and pledge to obey acts of Congress and presidential proclamations relating to slavery. To encourage the political reorganization of the southern states, he promised to extend recognition when they reestablished governments supported by as few as one tenth of their 1860 voters who took the oath of allegiance. Recognizing that loyal Union men might disagree on the mechanisms of reconstruction, the President allowed for approaches other than his own.

This program for reconstruction marked a decided change in Lincoln's thinking about the future of the southern states. At the outbreak of the war, believing that secession was the work of a small conspiratorial minority, he had hoped that the Unionist majority in the South would throw out the traitors and send loyal Representatives and Senators to Washington. But as the war wore on, he increasingly came to question whether loyal whites were in the majority in the seceded states. Now, late in 1863, he was afraid the South might follow the very course he had favored in the first months of the conflict. There was a real possibility that the Confederates, admitting defeat, might claim they had never been out of the Union—a legal fiction he and his advisers had stoutly maintained—and send back to Washington the same Congressmen who had denounced the Union in 1861. In order to prevent this possibility, his proclamation of amnesty required much sterner tests of loyalty and an acceptance of emancipation.

Lincoln's message, with its careful balancing of Radical and Conservative Republican proposals, was, as the Democratic New York *World* sourly remarked, "a creditable specimen of political dexterity." So dexterous was it that reactions in Congress were, as John Hay reported, "something wonderful." The Radicals were beaming, and at the other extreme, Conservatives pronounced the message "highly satisfactory." With the lions lying down with the lambs, it really seemed to Hay "as if the millennium had come."

Perhaps the strongest words of praise came from the Chicago *Tribune,* whose editor, Joseph Medill, had often been critical of Lincoln. After the President's message Medill felt "the political future begins to look clear." To finish off the war and bring about a restoration of the Union required "a clear head, an honest mind, and clean hands." In his private correspondence Medill was positive that Republicans would nominate "Old Abe" for reelection by acclamation.

Lincoln tried to think as little as possible about the 1864 election. When newspapers began to agitate the issue, he remarked

testily, "I wish they would stop thrusting the subject of the Presidency into my face. I don't want to hear anything about it."

But, for all the burdens of his office, he did desire reelection. As he remarked later, he viewed a second term not as just a personal compliment, but as an expression of the people's belief that he could "better finish a difficult work . . . than could any one less severely schooled to the task." Custom prohibited him from campaigning for office, but as the nominating season approached, he made a point of hosting numerous receptions and dinner parties for political friends and possible supporters.

Mary Lincoln cooperated in promoting her husband's reelection. Her health had improved, and she gained greater control over her emotions when she was obliged to contrast her own problems with those of her youngest half sister, Emilie Todd Helm, whose husband, Confederate general Benjamin Hardin Helm, had been killed at Chickamauga. Inspirited by a visit from Emilie, Mary shed her depressing mourning clothing and appeared at the White House New Year's Day reception in a purple dress trimmed with black velvet.

But Lincoln knew it was going to take more than White House receptions to assure his reelection. No President since Andrew Jackson had served a second term, and within the Republican Party there was considerable opposition to Lincoln. In most cases, dissatisfaction with the President did not derive from basic ideological differences. Virtually all Republicans agreed that the war must be fought until victory, that slavery had to be abolished, and that some conditions had to be imposed on the southern states before they could be readmitted to the Union. But there was disagreement over Lincoln's ability to attain these goals. The best evidence of his ineffectuality was that after two and a half years of costly, bloody warfare, the 20 million loyal citizens of the North were unable to overcome 5 million rebellious southerners.

Among the alternative candidates being considered were Frémont and Seward. But most rested their hopes on the Secretary of the Treasury, Salmon P. Chase. Chase's disaffection with the administration of which he was part had been steadily

increasing. He resented the easygoing relationship Lincoln had with Seward, but there was more to it than that. Chase's discontent stemmed fundamentally from his conviction that he was superior to Lincoln both as a statesman and as an administrator.

Lincoln regarded Chase's rather clumsy efforts to promote himself with detached amusement. The President could afford to be confident because throughout the North his partisans were quietly working to secure his renomination. In February, Lincoln's supporters in the Ohio state Republican convention rammed through a resolution urging his renomination. Then, two days later in the House of Representatives, a savage attack on corruption in the Treasury placed the blame squarely on Chase, and hopes for a Chase presidency ended. Sore and unhappy, the Secretary withdrew from the contest on the grounds that his home state of Ohio had expressed preference for another candidate.

Inevitably, politics affected Lincoln's program for reconstructing the southern states. Always alert to what they perceived as a threat of Caesarism, Democrats saw political implications in the President's 10 percent plan. "By setting up state governments, representing one-tenth of the voters, in Arkansas, Louisiana, Tennessee, and North Carolina," the New York *World* noted, Lincoln could "control as many electoral votes as may be needed to turn the scale" in the next presidential election, and it reminded its readers that if the President was successful, "one voter in Arkansas will exert as much political power as ten citizens of New York."

Republicans, too, came to recognize that once a southern state was reorganized and recognized, it would be eligible to send delegates to the Republican National Convention scheduled to meet in Baltimore on June 7. Consequently, those Republicans in Congress opposed to Lincoln's renomination took the lead in attacking the governments set up under the President's plan of reconstruction as a way of blocking his renomination. Lincoln saw clearly that the fate of his recon-

struction plan depended on the outcome of the race for the presidential nomination.

In turn, that contest would depend on the success of the Union armies, and in the winter of 1863–64 the outlook for the Lincoln administration was bad. Ever since Gettysburg, the Army of the Potomac and the Army of Northern Virginia seemed to be doing a slow dance. In the West, after victories at Lookout Mountain and Missionary Ridge, the Union armies remained largely idle. At the same time, death and desertions were depleting the strength of Union forces, and there were virtually no new volunteers. Between February 1 and March 14, Lincoln ordered a draft of 700,000 more men.

In these grim months a streak of ruthless determination, not hitherto noticeable, began to appear in Lincoln's character. The war had gone on too long; it was time to force it to a close. Outraged when the Confederacy threatened to shoot captured Negro soldiers, Lincoln issued an order of retaliation. "For every soldier of the United States killed in violation of the laws of war," it read, "a rebel soldier shall be executed; and for every one enslaved by the enemy, a rebel soldier shall be placed at hard labor on the public works." It was an order that pleased many northerners, horrified by reports of Confederate brutalities toward Union prisoners. But it remained an empty threat. In time Lincoln came to reject retaliation because, he wrote Stanton, "blood can not restore blood, and government should not act for revenge."

Out of this frustration and growing sense that something had to be done to break the military stalemate arose the plan for a daring raid against Richmond. It originated with Colonel Ulric Dahlgren, the son of Admiral John Dahlgren and a longtime favorite of the President's. Though this young man had lost a leg in battle, he was vigorous and ambitious, and he convinced Lincoln that a two-pronged cavalry raid could attack Richmond simultaneously from the east and the west, break through its defenses, and reach the infamous Belle Isle Prison, where many Union captives were held. The ill-fated expedition got under

way on February 28. Both forces were repulsed on the outskirts of Richmond, and Dahlgren was killed. On his body Confederates claimed they discovered papers that showed he planned, after releasing the prisoners, to burn the Virginia capital, pledging not to allow "the rebel leader Davis and his hateful crew" to escape. High-ranking Union officers immediately, but not altogether convincingly, denied the authenticity of these documents, and they could not be linked to Lincoln. But Dahlgren's raid did reflect the President's determination to take any steps to end the rebellion.

The President saw little evidence that the commanders of the Army of the Potomac shared his sense of urgency. Throughout the fall and into the winter Meade engaged Lee in an elaborate campaign of feints and maneuvers, but nothing came of the sharp clashes at Bristoe, Kelly's Fort, and Mine Run. Inevitably Lincoln began to contrast the lethargy of the Army of the Potomac with the extraordinary energy demonstrated by the western armies under Grant and Sherman—failing to recognize that no small part of the success of these generals stemmed from the inability of the President or Secretary of War to interfere with their plans. When Lincoln learned that Meade had allowed General James Longstreet's army, which had been fighting in eastern Tennessee, to retreat into western Virginia without molestation, he exploded in anger: "Can anybody doubt if Grant were here in command that he would catch him?"

Still, he was not ready to bring Grant in from the West. One reason was that the general was being talked about as a possible presidential candidate in 1864. Since his political views were unknown, he was being wooed by both Democrats and Republicans. With General McClellan conspicuously courting the Democrats, Lincoln was not about to appoint another general in chief who had political aspirations. He was only reassured when a close friend of Grant's brought to the White House the general's letter pledging that nothing could persuade him to be a candidate for President. "You will never know how gratifying that is to me," the President said after reading the letter. "No man knows, when that presidential grub gets to gnaw-

ing at him, just how deep it will get until he has tried it; and I didn't know but what there was one gnawing at Grant."

With that obstacle removed, Lincoln appointed Grant lieutenant general, a rank unused since the days of George Washington, and named him general in chief of the armies. Halleck would be his chief of staff, acting as intermediary between the Commander in Chief, the Secretary of War, and the general in chief.

Summoned east, Grant arrived in Washington on March 8, just in time for the weekly White House reception. Arriving at the White House, the general made his way through the throng of buzzing visitors toward the tall figure of the President. When Lincoln spotted this medium-sized, inconspicuously dressed man, he greeted him warmly, saying, "Why, here is General Grant! Well, this is a great pleasure, I assure you!" A few minutes later Grant was led into the crowded East Room, and so many people pressed to greet him that he was obliged to stand on a sofa to avoid being trampled while he was shaking hands.

In Grant, Lincoln had a commander he liked and trusted. It was an advantage that Grant was from Illinois. His lack of flamboyance and his seeming inattentiveness to rank and protocol endeared him to the President. Most of all, Lincoln told another officer, he liked Grant because "he doesn't worry and bother me. He isn't shrieking for reinforcements all the time. He takes what troops we can safely give him and does the best he can with what he has got."

The President wanted to give the new general in chief everything he reasonably could. He approved Grant's decision to reorganize and consolidate the cavalry of the Army of the Potomac into a separate corps, and he agreed to the appointment of Grant's young favorite, Philip Sheridan, to command it. Once, Grant offended Stanton by withdrawing too many men from the fortifications of Washington, and both men took their cases to the White House. After hearing them out, Lincoln told his Secretary of War, "You and I, Mr. Stanton, have been trying to boss this job, and we have not succeeded very well with it.

We have sent across the mountains for Mr. Grant to relieve us, and I think we had better leave him alone to do as he pleases."

It was a tribute to Lincoln's skill in managing men that even while giving the general independence, he succeeded in reshaping Grant's strategy—and that his tact and diplomacy permitted the general to think he was conducting the war with a free hand.

Grant was painfully aware that the Army of the Potomac and the Army of Northern Virginia for three long years had "fought more desperate battles than it probably ever before fell to the lot of two armies to fight, without materially changing the vantage ground of either." He was convinced that success would never come through more such inconclusive engagements. Instead, Grant developed a plan for simultaneous attacks on the Confederate heartland by all the Union armies. The concerted movement was to begin on the fifth of May.

When Lincoln learned of Grant's plan, he was, as Hay recorded, "powerfully reminded" of his "old suggestion so constantly made and as constantly neglected to move upon the enemy's whole line so as to bring into action to our advantage our great superiority in numbers." But he pretended to be surprised when Grant told him about it.

In the early hours of Wednesday, May 4, the Army of the Potomac moved across the Rapidan River to begin a new campaign against the Army of Northern Virginia. The next day Butler landed 30,000 troops on the south side of the James River, threatening Petersburg. On May 7 Sherman launched his sweep through Georgia, aimed at destroying the Confederacy's main east–west transportation line and capturing Atlanta.

Lincoln watched the campaign with painful interest. For the first two days, as Grant's army plunged into the Wilderness—that trackless tangle of trees and undergrowth that had been the scene of Hooker's defeat—the President received no news, because his general in chief had forbidden newspaper correspondents to use the telegraph. Not until Friday morning did he receive an indirect report from Grant: "Everything pushing along favorably." At two o'clock the next morning he interviewed a correspondent

from the New York *Tribune* who had just left the army. Grant had told him, "If you do see the President, tell him that General Grant says there will be no turning back." With that, Lincoln felt "considerably cheered."

Then the shattering real news began to come in. Grant had thrown his army of 100,000 men against Lee's much smaller force in the Wilderness, attempting to flank it, and in two days of ferocious fighting had suffered more than 14,000 casualties. Failing to turn Lee's army, Grant then moved east, only to encounter Lee again at Spotsylvania, where between May 10 and May 19 more than 17,500 Union soldiers were killed or wounded. Over a period of two weeks the Army of the Potomac lost nearly 32,000 men. Thousands more were missing.

During this terrible time Lincoln hardly slept at all. One morning Francis B. Carpenter, the young artist who was painting a picture he called *First Reading of the Emancipation Proclamation of President Lincoln,* caught sight of him in the hallway of the executive mansion, "clad in a long morning wrapper, pacing back and forth [along] a narrow passage leading to one of the windows, his hands behind him, great black rings under his eyes, his head bent forward upon his breast—altogether a picture of the effects of sorrow, care, and anxiety."

Despite the hideous losses, the President did not despair, because Grant, unlike all the previous commanders of the Army of the Potomac, did not withdraw but continued to push against Lee's army. Lincoln took great comfort from the message that Grant sent Stanton on the seventh day of the fighting: "I propose to fight it out on this line if it takes all summer."

"The great thing about Grant," Lincoln said, "is his perfect coolness and persistency of purpose. . . . He has the grit of a bull-dog!"

Fortunately for Lincoln, Grant's losses in Virginia had no effect on the Republican nominating convention, which met in Baltimore on June 7–8, and unanimously renominated the President. Initially it was assumed that Hamlin would be renominated as his running mate, though there had been talk

about selecting a War Democrat, like Andrew Johnson of Tennessee or General Benjamin F. Butler. Pressed to state his preference, the President wrote to Nicolay in Baltimore: "Wish not to interfere about V.P. Can not interfere about platform. Convention must judge for itself."

Left to make their own selection, the delegates floundered in a sea of politics. Quite early Whitelaw Reid, correspondent of the Cincinnati *Gazette,* judged that "Hamlin had lost his hold. Men seemed to consider it their duty to support him; but there was no enthusiasm about it." Eventually, after much last-minute shifting of ballots, Andrew Johnson was nominated.

Lincoln never explained his stand on the vice presidential nomination. His failure to name Hamlin may have reflected his awareness that Hamlin was very radical on questions relating to slavery and the South. Lincoln jokingly remarked that he did not fear the Confederates would assassinate him, because they knew Hamlin would take his place. Lincoln also thought there was something to be said for choosing a War Democrat to symbolize the broad coalition on which the National Union Party hoped to rest, and for picking a southerner to stress that all the states still remained in the Union. He also admired Johnson's courage in sticking to the Union after his state seceded. But at bottom he simply did not think much about the office of the Vice President. Consequently, it did not make a great deal of difference to him whom the convention selected.

Lincoln's renomination put him in a better position to assert his leadership both in his administration and in his party. Treasury Secretary Chase was the first to feel the President's new strength. Worn ragged by the pressures of meeting the war's vast expenses, Chase became more prickly in his relations with the President. The two men felt uncomfortable when they were in the same room, and Chase only occasionally attended Cabinet meetings.

Toward the end of June the Secretary precipitated a crisis. When the respected John J. Cisco resigned as assistant treasurer of the United States—a post that was next only to the Secretary

of the Treasury in importance—Chase proposed to replace him with one of his cronies, Maunsell B. Field. Lincoln refused for political reasons to nominate Field and asked the Secretary to reconsider. When Chase replied by asking for a personal conference with the President, Lincoln declined. "The difficulty does not lie within the range of a conversation between you and me," he wrote to the Secretary. "As the proverb goes, no man knows so well where the shoe pinches as he who wears it."

The stiff tone of Lincoln's letter made Chase think his continued service in the Cabinet was "not altogether agreeable" to the President, and once again he submitted his resignation. When Lincoln accepted it, Chase was dumbfounded. It never occurred to him that the Baltimore convention had changed the political landscape. Chase's friends rallied to his defense, but Lincoln refused to reconsider his decision.

In order to avoid political and financial damage, Lincoln moved swiftly to name a replacement, nominating another Ohioan, former governor David Tod. It was an unfortunate choice, for Tod, as the New York *Herald* unkindly put it, knew "no more of finances than a post." Vastly upset, the Senate Finance Committee, headed by William Pitt Fessenden of Maine, urged that Tod's name be withdrawn, but the President refused. A crisis was avoided when Tod telegraphed his declination, on the grounds of poor health.

The next morning Lincoln nominated Fessenden. The Senator was horrified. He did not want to leave the Senate and felt physically unable to perform the job. Turning to Stanton for advice, he said he thought the job would kill him. The Secretary of War responded bluntly, "Very well, you cannot die better than in trying to save your country." Unhappily Fessenden accepted.

With his Cabinet reconstituted, Lincoln turned to asserting his leadership in Congress, where Republicans were now more sharply divided into Radical and Conservative factions, both of which were critical of the President. On no issue was there more hostility to the President than on reconstruction.

In the final days of the session, when many members were absent, Republican leaders suddenly realized they were about

to adjourn without having passed any significant legislation on the subject. They could not even muster a sufficient majority to adopt the Thirteenth Amendment abolishing slavery. Hastily they turned to a bill that Henry Winter Davis, a Radical critic of the administration, called "the *only* practical measure of emancipation *proposed* in this Congress." Called the Wade-Davis Bill, after the chairmen of the House and Senate committees that sponsored it, the measure asserted congressional, rather than executive, control over the reconstruction process. Its terms were much harsher than those required under the President's plan. As a first step in the reorganization of any southern state, the bill required the complete abolition of slavery. It specified that 50 percent, rather than the President's 10 percent, of the 1860 voters must participate in elections to reconstitute those states' governments. Further, the bill imposed on electors of constitutional conventions in the seceded states an "iron-clad" oath of loyalty, a vow that they had never voluntarily borne arms against the United States or aided the rebellion, rather than the oath of prospective loyalty in Lincoln's plan of amnesty.

Passed by Congress on July 2, 1864, the bill demonstrated the continuing opposition on the part of some Radical Republicans to Lincoln's reelection and in part reflected their fears that Lincoln might win reelection through the electoral votes of states under military control. Faced with such a revolt on the part of Republican congressional leadership, Lincoln decided to reassert his authority. Rumors spread that he would not sign the bill.

As Congress tried to complete its business by noon on July 4, the President was at the Capitol examining numerous measures that had been passed during the final hours of the session. Anxious about the fate of the Wade-Davis Bill, Republican Senators and Representatives gathered about him and watched him push that measure aside. When Zachariah Chandler, the Radical Senator from Michigan, asked the President whether he was going to sign, Lincoln replied with some impatience, "Mr. Chandler, this bill was placed before me a few minutes before

Congress adjourns. It is a matter of too much importance to be swallowed in that way."

In the end, Lincoln decided to pocket veto the Wade-Davis Bill—that is, to decline to sign it, so that with the adjournment of Congress it would fail to become law. Radical resentment smoldered against Lincoln, but he remained in control of the field, clearly in charge of the reconstruction process.

How long he would remain in charge depended on the outcome of military operations, and prospects were gloomy. In Georgia, Sherman had met a bloody defeat at Kennesaw Mountain, and Grant was failing to overwhelm Lee's army. After mounting a senseless and doomed charge at Cold Harbor, Grant shifted strategy. On June 14 he began moving the Army of the Potomac through the swamps of the Chickahominy River, where McClellan's troops had fought in 1862, to the south side of the James River. There the Army of the Potomac, joining Butler's army, could be supplied by sea, and there it could cut the rail lines that connected Richmond to the South.

Grant's change of base was brilliantly executed, so that Lee had no certain idea of his whereabouts. Once his army had crossed the James, Grant launched an immediate assault on the heavily fortified city of Petersburg, Virginia, through which ran three key railroads. Repulsed, Grant settled down for a siege. Now, for the first time, he contemplated a campaign of attrition. He would pin Lee's army down so that no reinforcements could be sent to fight against Sherman.

In six weeks of incessant fighting, nearly 100,000 Union soldiers—more than the total number in Lee's army at the beginning of the campaign—were either killed or wounded. The people of the North, who had been overly optimistic when Grant assumed command, were slow to realize what was happening. Their newspapers, controlled by War Department censorship, told them that Grant had "won a great victory." But then the daily black-bordered newspaper columns listing the dead brought home the enormity of war. As thousands of injured men poured into the hospitals around Washington, it was no

longer possible to conceal the costs of the campaign. The country shuddered with revulsion at the slaughter. Grieving for "our bleeding, bankrupt, almost dying country," Horace Greeley wrote the President of the widespread dread "of fresh conscriptions, of further wholesale devastations, and of new rivers of human blood."

Lincoln increasingly brooded over the war and his role in it. Often, when he could spare the time from his duties, he sought an answer to his questions in the well-thumbed pages of his Bible, reading most often the Old Testament prophets and the Psalms. He had come to feel, as he told a delegation of Baltimore African Americans who presented him a magnificently bound Bible in appreciation of his work for the Negro, that "this Great Book is the best gift God has given to man."

With the burden of a never-ending war weighing ever more heavily on his shoulders, Lincoln often reverted to the idea that individual actions were predetermined by the unknowable wishes of some higher power. In April he wrote a long letter to a Kentucky editor explaining why he had felt compelled to shift from his inaugural pledge not to interfere with slavery to the policy of emancipation. The letter contained his most explicit view of individual responsibility: "I claim not to have controlled events, but confess plainly that events have controlled me," he said. "Now at the end of three years struggle the nation's condition is not what either party, or any man devised, or expected. God alone can claim it."

FIFTEEN

I Am Pretty Sure-footed

In early July 1864, a visitor found Lincoln deeply depressed, "indeed quite paralyzed and wilted down." He had reason to feel blue. War weariness was spreading, and demands for negotiations to end the killing were becoming strident. The Democrats were organizing for their national convention, to be held in Chicago at the end of August, and they were likely to adopt a peace platform. The Republicans were badly divided, and Lincoln was whipsawed between those who thought he was too lenient toward the South and those who thought him too severe. Worst of all, the Union armies appeared stalemated. Sherman was approaching Atlanta but was not, apparently, nearer victory. In the East, Grant was bogged down in a siege of Petersburg.

To make matters worse, Washington itself was once more threatened. To relieve Grant's pressure on Richmond, Jubal A. Early, heading the II Corps of the Army of Northern Virginia, marched down the Shenandoah Valley almost without opposition and crossed the Potomac. His force was small—only about 15,000 men—but as it spread out over the Maryland countryside, it was strong enough to levy tribute from Hagerstown and Frederick before turning east toward Washington. On July 9, at the Monocacy River, the invaders pushed aside the Union defending force and moved close to the national capital. Halleck did what he could by giving rifles to government clerks and

arming ambulatory soldiers in the hospitals, but it was far from clear that this makeshift force could hold off the Confederate invaders.

On July 11 Early's men marched through Silver Spring, Maryland, and approached the sturdy but feebly manned defenses of Fort Stevens. The Confederates came within 150 yards of the fort before artillery fire forced them back.

Lincoln was in the fort when it was first attacked. Having driven out from Washington in his carriage, he mounted the front parapet. He borrowed a field glass from a signal officer and looked out to where the Confederates were advancing. "He stood there with a long frock coat and plug hat on, making a very conspicuous figure," the officer recalled. When a man standing near him was shot in the leg, a soldier roughly ordered the President to get down or he would have his head knocked off. Lincoln coolly descended, got into his carriage, and was driven back to the city.

The next day Early's Confederates made one last effort to capture the capital. Once again the heaviest fighting was at Fort Stevens, and President and Mrs. Lincoln, along with other prominent public officials and their wives, came out to witness it. Thoughtlessly General Horatio G. Wright, who had been dispatched by Grant to assist in the defense of Washington, invited the President to mount the parapet to get a clear view as Union soldiers charged the enemy line. After a surgeon standing near him was shot, Wright asked the President to step down. Lincoln insisted on remaining until the general said he would have him removed forcibly. "In consideration of my earnestness," Wright recalled, "he agreed to compromise by sitting behind the parapet instead of standing upon it."

After the failure of his final assault Early retreated from Washington. Wright made a halfhearted attempt to follow the Confederates, but he soon halted, as Lincoln said scornfully, "for fear he might come across the rebels and catch some of them."

On July 30, after weeks of inactivity, Grant tried to break the defenses of Petersburg by exploding a huge mine under the

Confederate line; 15,000 Union troops rushed into the crater produced by the explosion, but they were poorly led by drunken or incompetent officers, and within hours 4,000 men were killed or wounded.

Even before this fiasco, as Union losses continued to mount, Lincoln had felt obliged to call for 500,000 more soldiers. This time the draft was going to hit comfortable middle-class families, because Congress had abolished the provision that had allowed a man to "commute" his military service by paying $300. Almost simultaneously, as the costs of the war grew, Secretary of the Treasury Fessenden announced a new $200 million loan; the credit of the government was now so poor that he had difficulty finding purchasers.

Lincoln, faced with all these problems, was pessimistic about his chances for reelection. "You think I don't know I am going to be beaten," he said to a friend, "*but I do* and unless some great change takes place *badly beaten.*"

Then, in the last days of August, with the assembling of the Democratic National Convention at Chicago, the outlook for Lincoln brightened. The Democrats' platform demanded "a cessation of hostilities." This made it easy for Republicans to brand the platform "the Chicago Surrender." Then the convention nominated General George B. McClellan, the leading War Democrat, for President. The two wings of the Democratic Party had struck a bargain: The Peace Democrats dictated the platform, while their opponents named the presidential candidate.

After some delay McClellan disavowed the peace plank. He could not look in the face of his "gallant comrades of the army and navy, who have survived so many bloody battles, and tell them that their labors and the sacrifice of so many of our slain and wounded brethren had been in vain." But the damage was done. As one of McClellan's admirers said, his letter accepting the nomination of a party on whose platform he could not run amounted to "twaddle and humbug."

On September 4, as if timed to make a mockery of the Democratic announcement that the war was a failure, came a

message from Sherman: "Atlanta is ours, and fairly won." Almost simultaneously came news that Rear Admiral David G. Farragut had captured Mobile, Alabama, the last major gulf port in Confederate hands. Joyfully Lincoln proclaimed a day of thanksgiving and prayer for "the signal success that Divine Providence has recently vouchsafed to the operations of the United States."

"I cannot run the political machine," Lincoln was quoted as saying during the campaign. "I have enough on my hands without *that*. It is the *people's* business."

Lincoln did not take a public role in the campaign. His appearances were rare, and he took no public notice of attacks made by Democrats. Nevertheless, he was intimately involved in the behind-the-scenes management, especially efforts to secure party unity. Indeed, as Treasury Secretary Fessenden remarked, "The President is too busy looking after the election to think of anything else."

"I confess that I desire to be re-elected," the President said frankly. "God knows I do not want the labor and responsibility of the office for another four years. But I have the common pride of humanity to wish my past four years Administration endorsed."

But Lincoln believed there was more than personal satisfaction at stake in the 1864 election. He saw it as a test of the feasibility of democratic government. If the people supported the Union cause, he said, they would act "for the best interests of their country and the world, not only for the present, but for all future ages." If, on the other hand, "they should deliberately resolve to have immediate peace even at the loss of their country, and their liberty, I know not the power or the right to resist them."

During the final weeks of the campaign he did his best to make the outcome certain and consolidate the party. He tried to enlist the support of prominent newspaper editors. As the soldier vote was overwhelmingly Republican, he encouraged soldier voting in the field. He even went so far as to permit

Republican agents to use a government steamer on the Mississippi River to collect the ballots of sailors on federal gunboats. Meanwhile, Republicans could take heart from the vigorous campaign that General Sheridan was waging to clear Early's Confederates out of the Shenandoah Valley.

Election night was rainy and foggy in Washington, and the President spent the evening at the War Department waiting for the returns. From the first reports it was clear that Republicans had won a huge victory. Presently Thomas T. Eckert, head of the telegraph office, came in, wet and muddy because he had fallen while crossing the street. In a genial mood the President was reminded of another rainy evening, back in 1858, when he had been on the square at Springfield reading the returns on his contest with Douglas for the Senate. On his way home he nearly fell in the muddy street, but he recovered himself and thought, It's a slip and not a fall. "For such an awkward fellow," he remarked to the group in the telegraph office, "I am pretty surefooted."

Pro-Confederate sympathizers in the North viewed Lincoln's reelection as a disaster. Most leaders of the Confederacy shared that opinion. Facing certain defeat unless some drastic measures could be taken, they began to explore their options. Some looked to peace negotiations. Others sought foreign intervention. President Davis sent an emissary abroad to offer emancipation of the slaves in return for British and French recognition. Many were willing to take the desperate risk of enrolling blacks in the Confederate armies. And inevitably, a few began to think that the only way to avert Confederate defeat was by removing the head of the Union government.

The idea of eliminating Lincoln was not new. Even before his first election in 1860, he received threats against his life. But once in the White House, he ceased to pay much attention to the danger. He believed that in a democratic society the Chief Executive must not be screened from the public. "It would never do," he told a member of Halleck's staff, "for a President to have guards with drawn sabres at his door, as if he fancied he

were, or were trying to be, or were assuming to be, an emperor." In addition, he recognized that it was impossible for him to be fully protected.

Consequently, Lincoln took few precautions to protect his security. During the first years of his presidency he often took long walks alone through the streets of Washington late at night, or strolled through the densely shaded White House grounds to the War Department with no escort. During the hot months when the Lincolns stayed at the Soldiers' Home, he often rode back and forth to the White House on horseback or in an unguarded carriage. He frequently attended the theater accompanied only by Mary, or sometimes Tad, and one or two civilian friends. His old friend Ward Lamon, the marshal of the District of Columbia, who felt responsible for his safety, was driven nearly to distraction by Lincoln's indifference to security. Finally, at Lamon's urging, the chief of the Washington Metropolitan Police detailed four plainclothes officers to accompany the President on his walks and to escort him to the theater. At night one of them remained on duty in the White House, outside the Lincolns' private rooms.

Hostility toward the President sharply increased during the last months of 1864, when disaffected northerners and embittered Confederates realized that the Lincoln administration was going to be continued for another four years. Since the ballot did not remove the despot, it was time to find other means.

In the Confederacy more thought was given to kidnapping Lincoln than to assassinating him: If Lincoln could be spirited away to Richmond, perhaps he would finally agree to negotiate with the Confederate government; the person of the President might make a powerful argument for suspending Grant's merciless attacks; and—the most appealing argument of all—Lincoln could be used as a hostage to secure the release of some 200,000 captured Confederate soldiers.

In late September 1864, Thomas Nelson Conrad, a Confederate preacher and spy, led a team of three associates through the lines into Washington, where they hoped to seize the President as his carriage turned into the grounds of the

Soldiers' Home. To their surprise they found Lincoln surrounded by a heavy guard. Stanton had ordered additional protection after what seemed to have been an attempt on the President's life one evening in August. Lincoln was returning to the Soldiers' Home when someone fired a shot at him. Lincoln was unscathed because his frightened horse raced for safety, but the next day the soldiers in his guard found his "eight-dollar plug-hat" with a bullet hole through the crown. Conrad remained in Washington until at least November 10, hoping for another opportunity, but he was unable to get near the President and so abandoned his mission.

In the weeks after his reelection Lincoln felt he had more important matters to worry about than threats to his life. As he was about to begin a second term, party workers harassed the President with applications for jobs. In the end, he concluded that he would change as few officeholders as possible because, he observed, "to remove a man is very easy, but when I go to fill his place, there are *twenty* applicants, and of these I must make *nineteen* enemies."

But some changes were necessary. Both Nicolay and Hay were exhausted after nearly four years of arduous service as his private secretaries, and Nicolay was in poor health. Lincoln decided to give him the lucrative appointment as United States consul at Paris and to make Hay the secretary of legation in France. He planned to offer the post of private secretary to Noah Brooks, the affable and politically astute correspondent of the Sacramento *Union*.

In the months between his election in November and his inauguration in March, the President also had to select four new members for his Cabinet. Earlier, for political reasons, he had been forced to ask for the resignation of Postmaster General Montgomery Blair. To take his place, he had appointed former governor William Dennison of Ohio acting Postmaster General. Now he made that appointment permanent. Shortly after the election Edward Bates, now seventy-one years old, offered his resignation as Attorney General. To replace him, Lincoln

turned to a loyal Kentuckian, James Speed, brother of his old friend Joshua F. Speed.

Lincoln had never found the Secretary of the Interior, John P. Usher, a very satisfactory colleague, and when Usher resigned on March 8, Lincoln welcomed an opportunity to replace him with Senator James Harlan of Iowa. Harlan had been one of the administration's strongest defenders in Congress, and the engagement of his daughter, Mary, to Robert Todd Lincoln strengthened his personal attachment to the President. In February, just before the beginning of the new term, Fessenden had also asked to be relieved of his duties as Secretary of the Treasury so that he could return to the Senate. Lincoln replaced him with the colorless but efficient comptroller of the currency, Hugh McCulloch.

In contrast to the members of the original Cabinet, none of these appointees was a major party leader. Lincoln now felt so strong that he did not have to surround himself with the heads of the warring Republican factions. His new appointees—like the holdovers, Seward, Stanton, and Welles—were warmly attached to Lincoln personally. He felt supremely confident of his ability to handle disagreements among them.

No appointment at the President's disposal had potentially greater significance than that of Chief Justice of the United States to succeed Roger B. Taney, who had died in October. Along with the Associate Justices that Lincoln had already appointed—Noah Swayne, Samuel F. Miller, David Davis, and Stephen J. Field—the next Chief Justice would form a majority on the Supreme Court that would decide vital cases arising out of the war. A lawyer himself, the President wanted to name a man deeply versed in the law, rather than an ideologue or a theorist; he hoped the new Chief Justice would recognize that "the function of courts is to decide *cases*—not *principles*."

Lincoln had deliberately postponed announcing a choice until after the election. In the interval, he went over in his mind the list of recommended candidates and rejected one after another. In the end, he was left with the name of Salmon P. Chase. The strongest argument against Chase was his unquenchable

political ambition. But the arguments in his favor were much stronger. During the next few years the most difficult cases likely to come before the Court were those involving the constitutionality of Lincoln's emancipation policies and the validity of the greenbacks with which the war was being financed. Chase's record, the President thought, put him unquestionably on the right side of these basic issues. The appointment would also conciliate the Radicals within the Republican Party. As Lincoln candidly explained to Ward Lamon, the Radicals now "will not dare kick up against any appointment I may make."

Lincoln's calculations proved exactly right, for the new session of Congress, which assembled on December 5, was remarkably supportive of his policies. Congressmen judged that it was not politically expedient to attack the policies of a President who had just been triumphantly reelected. Military victories further strengthened Lincoln's hand. The capture of Atlanta had probably determined the outcome of the 1864 election, and now, while Grant pinned down Lee's army before Richmond, Sherman continued his march to the sea, cutting a swath of devastation through Georgia. On December 25 he sent a telegram to Lincoln: I BEG TO PRESENT YOU AS A CHRISTMAS GIFT THE CITY OF SAVANNAH WITH 150 HEAVY GUNS AND PLENTY OF AMMUNITION AND ALSO ABOUT 25000 BALES OF COTTON. Meanwhile, General Thomas's forces had checked the Confederate invasion of Tennessee at Franklin (November 30) and routed Hood's army in the decisive Battle of Nashville (December 15–16).

The double victories of Thomas and Sherman prompted a remarkable transformation in Congress. Many members who had hitherto strongly opposed Lincoln now muted their criticisms, so that it seemed, as the *National Intelligencer* observed, that the country was entering on a new Era of Good Feeling.

In the spirit of conciliation Lincoln reached out for the support of Democrats as well as Republicans. His annual message contained an earnest plea to his political opponents to support the proposed constitutional amendment abolishing slavery throughout the United States. In the previous session of

Congress the measure had failed to secure the required two-thirds vote in the House of Representatives. Now Lincoln used his personal authority and considerable charm to influence Democratic and border-state Congressmen whose votes were in doubt.

This time more than two thirds of the House members voted for the Thirteenth Amendment and submitted it to the states for ratification. The President was delighted. He was convinced that the Thirteenth Amendment would fully settle all questions about the legal validity of the Emancipation Proclamation. Finally the country had "a King's cure for all the evils."

Even on the controversial subject of reconstruction, the new session of Congress was remarkably different from its predecessors. Seven months earlier every Republican in the Senate and all but six Republicans in the House had voted for the Wade-Davis Bill, to take the process of reconstruction out of the President's hands. Only Lincoln's pocket veto had kept the reconstruction process under the control of the executive branch. Now, in a remarkable turnabout, Congress failed to adopt any reconstruction legislation, leaving the issue entirely in Lincoln's hands.

The November elections were principally responsible for the change. Republican Congressmen were not about to defy a President recently reelected with a clear popular mandate. But they also found it easier to go along with the President's wishes on reconstruction because circumstances had changed. While Congress was debating the proposed Thirteenth Amendment, it was also moving, with the President's blessing, to create the new Bureau of Refugees, Freedmen, and Abandoned Lands, intended to supervise the transition from slavery to freedom in the South. This Freedmen's Bureau Act, which gave the federal authorities guardianship over the recently emancipated slaves, made it easier for Republican Congressmen to accept even imperfect reconstruction governments in the South, since those governments would be shorn of much of their power.

The adoption of the Thirteenth Amendment provided another incentive for Republicans to recognize the loyal reconstruction regimes Lincoln was establishing in southern states as

they fell. Before that amendment could go into effect, it had to be ratified by twenty-seven of the thirty-six states. Illinois, as Lincoln proudly reported, began the process on February 1, and the other northern states were sure to follow. The border states of Maryland, West Virginia, and Missouri had all now abolished slavery and were expected to ratify the amendment. But slavery persisted in Delaware and Kentucky, where the outcome was doubtful. Even if both states approved, the votes of two additional states were needed—and those votes could only come from states that had been in the Confederacy. The most likely possibilities were Louisiana, Arkansas, and Tennessee. By recognizing the regimes that Lincoln had created in 1862, when he appointed military governors for those states, Congressmen could ensure the speedy death of slavery throughout the nation.

Inauguration Day, March 4, 1865, began wet and windy. Despite the abominable weather, a crowd began to gather at the east front of the Capitol before ten o'clock, and by the time the ceremonies began at noon, the spectators were sodden. Women, wearing their long, cumbersome dresses, were in a "most wretched, wretched plight," Noah Brooks observed; "crinoline was smashed, skirts bedaubed, and moire antique, velvet, laces, and such were streaked with mud from end to end."

First came the swearing-in of the Vice President, which took place in the Senate chamber. Newly arrived from Tennessee, exhausted from the long trip and unsteady from a bout of typhoid fever, Andrew Johnson asked for some whiskey to calm his nerves. The drink went to his head. In a long, maudlin speech he boasted of his plebeian origins and reminded the embarrassed members of the Supreme Court, the Cabinet, and even the diplomatic corps—"with all your fine feathers and gewgaws"—that they were but creatures of the people. When Johnson finally finished and took the oath, the President leaned over to the parade marshal and whispered, "Do not let Johnson speak outside."

Then the presidential party moved onto the platform at the east front of the Capitol. As Lincoln's tall figure appeared,

"cheer upon cheer arose, bands blatted upon the air, and flags waved all over the scene." When the crowd quieted, the President stepped forward. At just that moment the sun burst through, flooding the scene with light; Chief Justice Chase saw it as "an auspicious omen."

In his clear, high-pitched voice Lincoln read one of the shortest inaugural addresses in American history (703 words) and also the most memorable. During the past four years of war, he noted in a tone of weariness, "public declarations have been constantly called forth on every point and phase of the great contest." Consequently, he could devote the larger part of his address to an explanation of the origins of the conflict and an examination of its significance. Notably lacking from his brief account of how the war began was any attribution of blame. "All dreaded it—all sought to avert it." But one of the parties to the conflict—throughout, he carefully avoided referring to the South or the Confederacy—"would *make* war rather than let the nation survive; and the other would *accept* war rather than let it perish." Interrupted by a burst of applause at this point, Lincoln continued. "And the war came." Slavery was, "somehow, the cause of the war." It was the one institution that divided the nation. The people of both sections had shared values; they "read the same Bible, and pray to the same God, and each invokes His aid against the other."

Lincoln then sought, both for himself and for the American people, an explanation of why the war was so protracted. The war continued because "the Almighty has His own purposes," which are different from men's purposes. Addressing a devout Bible-reading public, Lincoln knew he would be understood when he invoked the familiar doctrine of exact retribution, the belief that the punishment for a violation of God's law would equal the offense itself. Quoting from Matthew, he announced, *"Woe unto the world because of offences! for it must needs be that offences come; but woe to that man by whom the offence cometh!"* That warning might seem to apply only to slaveholders, but Lincoln had consistently held northerners as well as southerners responsible for introducing slavery and for protecting it

under the Constitution. Consequently, as God now willed to remove the offense of slavery, He gave "to both North and South, this terrible war, as the woe due to those by whom the offence came."

How long, then, would the war last, and when would retribution cease? He made no firm pledge: "Fondly do we hope—fervently do we pray—that this mighty scourge of war may speedily pass away." Then he added one of the most terrible statements ever made by an American public official: "Yet, if God wills that it continue, until all the wealth piled by the bond-man's two hundred and fifty years of unrequited toil shall be sunk, and until every drop of blood drawn with the lash, shall be paid by another drawn with the sword, as was said three thousand years ago, so still it must be said, 'the judgments of the Lord, are true and righteous altogether.'"

This was a harsh doctrine, but it was one that absolved both the South and the North of guilt for the never-ending bloodshed. And by leaving the execution of this sanguinary judgment to the Almighty, Lincoln could turn to the more limited responsibilities of mortals. Voicing his deeply held sense of the nation's debt to those who had fought, suffered, and died, he promised "to care for him who shall have borne the battle, and for his widow, and his orphan." Then, with soaring eloquence, he concluded his address: "With malice toward none; with charity for all; with firmness in the right, as God gives us to see the right, let us strive on to finish the work we are in; to bind up the nation's wounds; to do all which may achieve and cherish a just, and a lasting peace, among ourselves, and with all nations."

After immense applause Lincoln turned to Chief Justice Chase and, laying his right hand on an open page of the Bible, repeated after him the oath of office, ending with an emphatic "So help me God!" He then kissed the Bible, and as artillery boomed and the crowd cheered, he began his second term.

Lincoln was so exhausted after the inauguration ceremonies that he took to his bed for a few days. There was nothing or-

ganically wrong. Although still physically powerful, he often felt terribly tired and had been losing weight. He was only fifty-six, but observers at the second inauguration thought he looked very old. Joshua Speed, who had not seen the President for some time, was shocked to find him looking so "jaded and weary." "Speed," said Lincoln, "I am a little alarmed about myself; just feel my hand." It was, remembered Speed, "cold and clammy."

Mary worried about his health. "Poor Mr. Lincoln is looking so broken-hearted, so completely worn out," she told her dressmaker, "I fear he will not get through the next four years." To get him away from his desk, she encouraged him to go to the theater. He enjoyed all sorts of theatrical entertainment, including Barney Williams, the blackface minstrel and Irish comedian, and he attended numerous plays that were little noted nor long remembered, like *The Marble Heart,* featuring the brilliant young actor John Wilkes Booth. Shakespeare's plays appealed to him most, and Lincoln rarely missed an opportunity to see one performed. In February and March 1864, at one of the most dangerous periods of the war, he took time to see the great tragedian Edwin Booth perform in *Richard III, Julius Caesar, The Merchant of Venice,* and *Hamlet.* Shakespeare's wit and the magic of his language delighted the President. "It matters not to me whether Shakespeare be well or ill acted," he remarked; "with him the thought suffices."

Mary also tried to divert her husband by taking carriage rides with him several afternoons a week. These were times for quiet conversation, when Lincoln remembered the past and planned for the future. Though he was only into the first weeks of his second term, he looked forward to the end of his administration, when, he told his wife, he wanted to take the whole family to Europe. He was not sure where they would ultimately make their home. Earlier he had talked of returning to Springfield and practicing law, but now he thought less about settling than of "roving and travelling."

Lincoln could afford to think in rosy terms of the future. Unaware of the considerable debts his wife had accumulated

during her shopping sprees, he was confident that he and Mary were comfortably provided for. Since most of his White House expenses were covered by congressional appropriations, he was able to save the bulk of his $25,000 annual salary and invest it. In addition to his house in Springfield, he owned 200 acres of land in Iowa, a town lot in Lincoln, Illinois, and nearly $60,000 in government securities—not an inconsiderable sum.

During these few quiet weeks after the second inauguration, the Lincolns had a chance to talk about Robert, who was now in the army. After graduating from Harvard in 1864, the President's oldest son wanted to enlist. But his mother was afraid; she had already lost two sons, and she grew hysterical at the possibility of losing another. Unwilling to do anything to upset his wife's precarious emotional balance, Lincoln encouraged Robert to go to Harvard Law School, but when the young man came home for the Christmas vacation in 1864, he was determined to "see something of the war before it ends." In January, finally overcoming Mary's resistance, Lincoln, writing "as though I was not President, but only a friend," asked Grant whether he could give Robert "some nominal rank" and allow him to join his military family. Promptly Grant welcomed the young man and commissioned him a captain. Robert's principal duty was to escort visitors to the Army of the Potomac from one place to another.

On March 20, at Mrs. Grant's prompting, the general invited the President to army headquarters at City Point for a few days, suggesting that the rest would do him good. Lincoln accepted immediately, adding that Mrs. Lincoln "and a few others" would come with him. Despite a furious gale, the Lincolns, accompanied by Tad, Mary Lincoln's maid, and two guards, boarded the *River Queen* and sailed down the Potomac on March 23. They were eager to get away from Washington, which Mary thought was a place filled with enemies and which Lincoln knew was a city filled with office seekers. They wanted to learn how Robert was faring in the army. And most of all, they needed rest.

They did not get much of it. At City Point they were welcomed with a round of lunches, dinners, and dances. Tad, a special pet of the soldiers, accompanied his father everywhere.

Lincoln began to feel better once he was away from Washington. On his first day at City Point he rode out on a special train to General Meade's headquarters, where he witnessed an attack on an enemy picket line. The next morning he greeted General Sheridan's troops, which had cleaned the Confederates out of the Shenandoah Valley and had come to assist Grant in the final campaign against Richmond. On another day Lincoln visited an army field hospital, where for more than five hours he moved from tent to tent, greeting each patient, including hospitalized Confederates.

Mary Lincoln had a bad time on the trip down the Potomac. Highly nervous, she was greatly upset when her husband made the mistake of telling her that he dreamed the White House was on fire, and she insisted on sending not one but two telegrams to Washington to be sure everything was all right. At army headquarters she felt out of place, but Lincoln, intent on fulfilling his many obligations, assumed she could cope in his absence. She could not.

When General Edward O. C. Ord's troops were to be reviewed at Malvern Hill, the President and most of the men rode ahead on horseback, leaving Mrs. Lincoln and Mrs. Grant to proceed in an ambulance over roads calf-deep in mud. A sudden jolt bounced the ladies against the top of the carriage. Mary, who had never fully recovered from her 1863 carriage accident, probably had an attack of migraine. When she finally arrived at the site of the review, she discovered that it had begun without her. Her husband was riding down the lines accompanied by Mrs. Ord, a strikingly handsome young woman, whose appearance must have reminded Mary that she had now become corpulent and her face heavy, with permanent down-turned lines.

That night, before the guests at dinner aboard the *River Queen,* Mary launched a tirade of abuse. She repeatedly attacked her husband for flirting with Mrs. Ord and demanded that General Ord be removed from command. Mortified, the

President tried to ignore his wife's remarks. For the next several days, ill and embarrassed, she spent most of her time in her cabin, and on April 1, to her husband's undoubted relief, she went back to Washington, leaving Tad with his father.

Once his wife was out of the picture, Lincoln could reveal that recreation was not his only object in going to City Point. His greatest worry now was that Union generals might let victory slip through their hands. Again and again during his two weeks at the front he expressed concern that Lee might break away from Grant, or that Joseph E. Johnston might slip out of Sherman's grasp in the Carolinas to join forces with Lee and continue the war.

Equally important was the President's determination to keep control of peace negotiations. Recently Lee had directly approached Grant, asking "an interchange of views" on "the subjects of controversy between [the] belligerents," and the President had been obliged to tell his commanding general that he must "have no conference with General Lee unless it be for the capitulation of General Lee's army." As Lincoln directed, "Such questions the President holds in his own hands, and will submit them to no military conferences or conventions."

Lincoln was not just ordering the generals to follow protocol; he wanted to make sure that any negotiations led not merely to a suspension of fighting but to a peace that would ensure his war aims of Union, Emancipation, and at least limited Equality. His worst fear, which he repeatedly expressed, was that once the Confederate armies were defeated, southern soldiers "would not return to their homes to accept citizenship under a hated rule; and with nothing but desolation and want through the South, the disbanded Confederate soldiers would be tempted to lawlessness and anarchy." Consequently, his objective was to secure not merely peace but reconciliation.

SIXTEEN

I Will Take Care of Myself

The visit to City Point rejuvenated Lincoln. Buoyed by the adulation of the soldiers and by the sense that final victory over the Confederacy was at hand, he had a new sense of strength.

Lincoln had every right to be pleased with himself. After four exhausting years he was now fully master of the almost impossible job to which he had been elected. He was unquestionably the choice of the American people, not a minority or accidental President. He headed an administration and a party that followed his leadership. He was Commander in Chief of the largest military and naval forces the country had ever raised, and at last they were functioning with machinelike efficiency. The United States Navy was strangling the Confederacy with its blockade. As Sherman's western army cornered Johnston's weakened forces in North Carolina, Grant moved to the south of Petersburg and Richmond. On April 1, in the Battle of Five Forks, he launched an attack that crumpled Lee's right flank and almost encircled Petersburg. Lee warned Jefferson Davis that he must be prepared to flee Richmond.

Lincoln wanted to be in on the finish. On April 3, learning that Petersburg had been evacuated, he closely followed federal troops as they entered the city. The Secretary of War was horrified. "Allow me respectfully to ask you," Stanton scolded, "to consider whether you ought to expose the nation to the conse-

quence of any disaster to yourself in the pursuit of a treacherous and dangerous enemy." But Lincoln, elated to learn that the Confederate government had fled and Richmond was in Union hands, brushed aside the warning. "I will take care of myself," he promised.

On April 4, as soon as the navy had removed most of the Confederate torpedoes in the James River, Lincoln set out with a small party to visit Richmond. When the U.S.S. *Malvern,* Admiral Farragut's flagship, could not pass a line of obstructions the southerners had placed in the river, the President transferred to a shallow-draft barge pulled by a tugboat. When the tug had to be sent to assist the admiral's ship, which the current had forced against a bridge, twelve sailors rowed Lincoln's barge upstream. The President was amused. "Admiral," he said to David D. Porter, who was in his party, "it is well to be humble."

Landing without notice or fanfare, the President was first recognized by some black workmen. Their leader, a man about sixty, dropped his spade and rushed forward, exclaiming, "Bless the Lord, there is the great Messiah! . . . Glory, Hallelujah!" He and the others fell on their knees, trying to kiss the President's feet. "Don't kneel to me," Lincoln told them, embarrassed. "That is not right. You must kneel to God only, and thank him for the liberty you will hereafter enjoy." Quickly word of the President's arrival spread, and he was soon surrounded by throngs of blacks, who shouted, "Bless the Lawd, Father Abraham Come."

As the small party walked up to Richmond's Main Street, six of the sailors from the barge, armed with carbines, headed the procession, and six others brought up the rear. In the center walked Lincoln, leading Tad with his left hand, and Admiral Porter. It was a beautiful warm day, and the President soon shed his long overcoat but continued to wear his tall stovepipe hat. Encountering a squad of New York soldiers, he asked for directions to the headquarters of General Godfrey Weitzel, who commanded the Union forces occupying the city.

The soldiers escorted him to the Confederate White House, where he sank into a comfortable chair in what had been

Jefferson Davis's study. After a little rest he went on a tour of the building, then had lunch with Weitzel and his staff. While they were eating, the general's three-seated army hack, drawn by four horses, was brought to the front of the building and Tad climbed into it and began shaking hands with all the freedmen, and some whites as well, who crowded around.

When the President emerged, there was cheering, and some members of the crowd threw their hats and bonnets into the air. Lincoln then drove to the Virginia statehouse, which had housed the Confederate congress. As one of his party recalled, it gave "every evidence of hasty abandonment and subsequent looting"; desks and chairs were upset, documents were scattered about, and Confederate thousand-dollar bonds littered the floors. Afterward, as the President drove through the more fashionable residential districts of the city, "blinds or shades were drawn and no faces were to be seen," but in the working-class areas he was surrounded by enthusiastic crowds.

Proceeding south, Lincoln went through the part of the business section devastated by fires that had broken out as the Confederates evacuated the city. Throughout the day, members of his entourage were fearful of attempts on his life, for it was almost impossible to protect the President when so many people pushed close to inspect and admire him. There was a moment of panic when a man clad in a gray Confederate uniform stood in a second-story window and appeared to point a rifle directly at Lincoln; but no shot was fired, and the presidential group moved on. In the late afternoon Lincoln went aboard the *Malvern,* where Admiral Porter posted a guard outside his cabin door to ensure the President's safety.

Lincoln's motive in going to Richmond was not just natural curiosity about the citadel of the Confederacy; it was a desire to help in the process of restoring peace. For this reason he took time to meet with John A. Campbell, the only high-ranking Confederate to remain in the capital. Urging the President to pursue a policy of "moderation, magnanimity and kindness" toward the South, Campbell secured his ready agreement "not to

exact oaths, interfere with churches, etc." and, in general, to make "no requisitions on the inhabitants [of Richmond] of any sort save as to police and preservation of order." But these promises did little to solve the larger issues involved in bringing Virginia back into the Union, and for that purpose Campbell suggested that Lincoln confer with the influential moderate leaders of the state.

The President invited Campbell to bring a delegation of such leaders aboard the *Malvern* the next morning. Campbell asked six or seven influential Virginians to accompany him, but only Gustavus A. Myers, a prominent Richmond attorney, agreed to do so. The President began by restating his indispensable terms for peace: "Restoration of the national authority; no receding by the Executive of the United States on the slavery question; no cessation of hostilities short of an end of the war, and the disbanding of all forces hostile to the government." If these were acceded to, he promised to consider other proposed conditions "in a spirit of sincere liberality."

Hoping to remain until the final Confederate surrender, Lincoln carefully studied the dispatches that Grant, Sheridan, and Meade forwarded to him. He rejoiced to read Sheridan's report that he had routed the enemy at Burke's Station, which ended, "If the thing is pressed I think that Lee will surrender." Promptly the President wired Grant, "Let the *thing* be pressed." But when surrender did not seem to be imminent, Lincoln and his party prepared to leave on April 8.

Lincoln's first visit on his return to the capital was to his Secretary of State, who had recently broken an arm and his jaw in a carriage accident and was confined to his bed. "I think we are near the end at last," Lincoln told Seward. He described Grant's victories and told of his visit to Richmond. He proposed to issue a proclamation for a day of thanksgiving, but the Secretary whispered that he should wait until Sherman captured Joseph E. Johnston. As Seward drifted off to sleep, the President quietly left the room.

On the night of April 9 Lincoln learned that Lee had surrendered to Grant at Appomattox, and he immediately told Mary.

At daylight the next day the firing of 500 cannons gave the news to the entire capital.

On the following night, April 11, the whole city, it seemed, turned out to celebrate. In the evening all the government buildings were illuminated. The dome of the Capitol could be seen for miles. An immense throng of people, many carrying banners, poured into the semicircular driveway leading to the North Portico of the White House. After repeated loud calls, the President appeared in a second-story window. Lincoln began to read from a speech he had prepared for the occasion. The light was bad, and after unsuccessfully trying to hold a candle in one hand and the pages of his manuscript in the other, Lincoln beckoned to Noah Brooks, who held up the light while the President read.

"We meet this evening, not in sorrow, but in gladness of heart," he began, and he expressed hope that the recent victories "give hope of a righteous and speedy peace." Promising a day of national thanksgiving, he offered the nation's gratitude to "Gen. Grant, his skilful officers, and brave men." That much was expected, but the rest of the address was not at all what the crowd had anticipated. "The re-inauguration of the national authority" was his principal subject, and before concluding, he warned that it was going to be difficult, the more so since "we, the loyal people, differ among ourselves as to the mode, manner, and means of reconstruction."

When Lincoln returned from Richmond, he had a new sense of urgency about reconstruction. He had firsthand knowledge of the devastation and suffering the war had caused in the South. More strongly than ever he felt that immediate action must be taken to restore stability in the conquered region. "Civil government must be reëstablished as soon as possible," he told Secretary Welles; "there must be courts, and law, and order, or society would be broken up, the disbanded armies would turn into robber bands and guerrillas."

Aware that his plan would arouse opposition, Lincoln intended his April 11 speech, as he told an old friend, "to blaze a way through the swamp" of legal entanglements and political

objections to his course. The speech was an attempt to defuse criticisms by making significant concessions to his Radical critics. He explicitly disavowed any claim that reconstruction was exclusively a function of the executive branch. Recognizing that Radicals objected to the Louisiana constitution because it did not give African Americans the ballot, he declared that he shared their discontent: "I would myself prefer that it were now conferred on the very intelligent, and on those who serve our cause as soldiers." This was an opinion Lincoln had expressed in private, but never before had any American President publicly announced that he was in favor of Negro suffrage.

At least one member of the crowd outside the White House that night recognized how much Lincoln was conceding to the Radicals. John Wilkes Booth fumed with hatred for the President. Born in Maryland in a slaveholding community, the twenty-six-year-old actor thought of himself as a northerner who understood the South. He was a handsome, vain young man, the next to the youngest—and illegitimate—son of actor Junius Brutus Booth, who was an alcoholic and mentally unstable.

Young Booth seemed destined for the theater. His brother Edwin, like their father, was a great actor, and his brother Junius Booth, Jr., was a major producer. John's brother-in-law was a noted comedian. After making his own debut at the age of seventeen, John Wilkes Booth was almost constantly on the stage. He looked the part of the hero. Though he was only five feet eight, he held himself erect, and his broad chest contributed to the impression of greater height. With curly black hair and a full mustache he had a slightly exotic look, which women often found irresistible.

It was in southern theaters, notably in Richmond, that he first gained recognition. Southerners appreciated his flamboyant, athletic style of acting: the twelve-foot leaps he sometimes made when appearing onstage, the duels that were so realistic that blood was shed, the impassioned love scenes. Offstage, his charm, his love of fun, and his excellent manners won him access to social circles in the Deep South from which he had been

excluded in Maryland, where people remembered that he was illegitimate.

Southerners also liked Booth because of his views about slavery. He believed "the country was formed for the white, not for the black man," and as sectional tensions mounted, he denounced what he called the treasonable activities of the abolitionist Republicans and called for retribution: "The South wants justice, has waited for it long, and she will wait no longer." His contempt for President Lincoln was open. He was as much offended by "this man's appearance, his pedigree, his coarse low jokes and anecdotes, his vulgar similes, and his frivolity" as he was by Lincoln's efforts "to crush out slavery, by robbery, rapine, slaughter and bought armies."

When Lincoln's reelection seemed increasingly probable, Booth decided something must be done to rid the country of this "false president," who clearly was "yearning for kingly succession." Exactly how Booth got in touch with the Confederate secret service is not known, but he had many contacts in the South, and the private funds he had used to buy quinine and other needed medicines to be smuggled into the Confederacy gave evidence of his good faith. After conferring with southern agents in Maryland, Boston, and Canada, he came up with the scheme of kidnapping Lincoln and holding him hostage for the release of southern soldiers. It cannot be proved that any Confederate authority knew about or approved Booth's plan, though it is clear that the abduction of the Union President was under consideration, at least at the lower levels of the southern secret service.

Booth recruited for his plot two of his boyhood friends from Baltimore, Samuel B. Arnold and Michael O'Laughlin. Expecting to take the President across the Potomac below Washington, he added the Prussian-born George A. Atzerodt from Port Tobacco, Maryland, because he had ferried Confederate spies across the river and knew all the inlets. John H. Surratt, who had served as a courier between secessionist sympathizers in Baltimore and southern authorities in Richmond, added firsthand knowledge of the Confederate un-

derground that was active in southern Maryland. His mother, Mary Surratt, who may or may not have known of the plots, offered headquarters for the conspirators in the inn she owned at Surrattsville, Maryland, and in the boardinghouse she opened on H Street in Washington. For the brute strength needed to overcome any resistance on the part of the President, Booth enrolled the burly Lewis Paine, who had served in John Singleton Mosby's Confederate Rangers. Finally, he allowed a young druggist's clerk, David E. Herold, to join the group; Herold was a trifler who gave the appearance of being not very bright, but as an avid bird hunter, he supposedly knew the poorly mapped roads below Washington.

It was an informally organized group, and the whole venture, despite its deadly seriousness, had a theatrical quality about it. At times Booth seemed to be playing one of his more melodramatic roles. To make sure that nobody misunderstood the script, he wrote an impassioned letter explaining his actions in advance, which he sealed and entrusted to his brother-in-law. "There is no time for words," he asserted, only to run on for some 1,300 words, attacking Lincoln, defending the South, and announcing that he intended "to make for her a prisoner of this man to whom she owes so much misery."

One of Booth's early plans was to abduct Lincoln while the President was riding in his carriage on the outskirts of the city. Learning that Lincoln planned to attend a theatrical performance at the Campbell Hospital on March 17, the conspirators decided to overpower him and his coachman. The attempt had to be aborted when Booth learned that Lincoln had remained in the city to review returning troops.

Instead of discouraging Booth, failure led him to contemplate a new course of action. As early as March 4 he had begun to think of assassination rather than abduction. Standing in the rotunda of the Capitol as Lincoln passed through to the portico, where he gave his second inaugural address, Booth reflected on the excellent chance he had to kill the President if he wished. The failure of the abduction scheme made that wish an obsession. Drinking very heavily at this time, he increasingly came to

think of himself as not just a self-appointed Confederate secret agent but as the reincarnation of a tragic hero. Often he saw himself as Brutus, striking down the despotic Caesar.

Lincoln's address on April 11 triggered Booth's shift from thought to action. Outside the White House that evening, he heard the President recommend suffrage for blacks who were educated or had served in the Union armies. "That means nigger citizenship," the actor muttered, and he vowed, "That is the last speech he will ever make." He urged Lewis Paine to shoot the President on the spot. When Paine refused, Booth turned in disgust to David Herold and exclaimed, "By God, I'll put him through."

Lincoln, of course, knew nothing of these plots as he continued to plan for a speedy restoration of the Confederate states to the Union on the most generous terms. This was the principal subject of discussion in the Cabinet meeting on Friday, April 14, 1865, which General Grant attended. The President was in great form. According to Frederick W. Seward, who attended in place of his bedridden father, all members expressed "kindly feeling toward the vanquished, and [a] hearty desire to restore peace and safety at the South." The Cabinet agreed on the importance of promptly restoring normal commercial relations with the former Confederate states.

How the southern states were to be governed during the transition from disunion to loyalty remained to be settled. Lincoln felt strongly that the reorganization of these states could not be directed from Washington. "We can't undertake to run State governments in all these Southern States," he told the Cabinet. "Their people must do that,—though I reckon that at first some of them may do it badly."

Stanton brought up a plan for the appointment of military governors, who would rule under martial law in the South until civilian rule could be reestablished. Under his proposal the military authorities would preserve order while the executive departments resumed their normal functions in the South: The Treasury Department would proceed to collect the revenues;

the Postmaster General would reestablish post offices and mail routes, and so on. Lincoln noted approvingly that the plan would bear further study.

When the discussion drifted to the military situation, everybody wanted to hear Grant's account of the surrender at Appomattox. Asking what terms had been extended to the common soldiers in the rebel army, Lincoln beamed when Grant said, "I told them to go back to their homes and families, and they would not be molested, if they did nothing more." Cabinet members wanted to know whether there was any news from Sherman in North Carolina. Grant replied that he was expecting word momentarily. Lincoln remarked that he was confident that there soon would be good news, since the previous night he had had the recurrence of a dream: He was on the water, and "he seemed to be in some singular, indescribable vessel, and . . . he was moving with great rapidity towards an indefinite shore." This dream, he said, had come to him before nearly every important event in the war—the firing on Antietam, Gettysburg, Vicksburg, and so on. The dream meant that there would be good news soon. "I think it must be from Sherman," he said.

Absorbing as were the prospects for victory and peace, they did not occupy all the President's time, even on so eventful a day. He had been up since seven, dealing with routine business. After breakfast, where he heard details of Lee's surrender at Appomattox from Robert, who was just back from Grant's army, the President returned to his office to meet visitors and petitioners. After the Cabinet meeting at eleven, the President ate an apple for lunch, then held more interviews, read more petitions, signed more papers.

At three he broke away from his desk to take a ride with Mary in an open carriage. They drove about the city and went out to the Navy Yard, where the President chatted with several sailors and went aboard the *Montauk,* a monitor that had been hit forty-seven times during the assault on Charleston harbor. Throughout the afternoon he was "cheerful—almost joyous," his wife recalled, and his spirits were so high that she said to

him, laughing, "Dear Husband, you almost startle me by your great cheerfulness."

"And well I may feel so, Mary," he responded, "I consider *this day,* the war, has come to a close." He then added, in what was as close to a reprimand as he ever offered to his wife, "We must *both,* be more cheerful in the future—between the war and the loss of our darling Willie—we have both, been very miserable."

Back at the White House, Lincoln found still more visitors. Dinner was served early because the Lincolns had promised to attend a performance of the comedy *Our American Cousin* at Ford's Theatre. By this time Mary had developed a headache and was inclined to stay at home, but her husband said he must attend. The evening newspapers had carried an announcement that he would be present and tickets had been sold on the basis of that expectation. Anyway, he added, if he remained at the White House, he would have to receive company all evening and would get no rest.

Lincoln's advisers urged him not to go to the theater. Before leaving on a mission to Richmond, Ward Hill Lamon, who often served as a presidential bodyguard, begged him, "Promise me you will not go out at night while I am gone, particularly to the theater." But the President had so often heard the marshal on this matter that, as Lamon said later, he "thought me insane upon the subject of his safety." Stanton, too, repeatedly warned Lincoln against mingling with promiscuous crowds at the theater. The occasion this evening was more dangerous than most, because it had been advertised that General Grant, fresh from his victories in Virginia, would join the President.

The Lincolns had trouble making up a theater party on April 14, perhaps because it was Good Friday. They invited the Stantons, but the Secretary of War refused because, he said, "Mr. Lincoln ought not to go—it was too great an exposure." Anyway, Mrs. Stanton disliked Mrs. Lincoln. After initially accepting a verbal invitation, Grant also declined. Julia Grant, who remembered all too well Mary Lincoln's behavior at City Point, was unwilling to be confined for hours with a woman of such uncertain

temper. She decided to visit her children in Burlington, New Jersey, and the general, always glad to escape the limelight, asked to be excused so he could join her. William H. Wallace, governor of Idaho Territory, and his wife also declined.

The Lincolns eventually turned to a young couple of whom they were fond: Clara Harris, the daughter of the Senator from New York, and her fiancé, Major Henry R. Rathbone, who had served with distinction in the war and could presumably offer the President protection. After picking up their guests, the Lincolns drove to Ford's Theatre through streets still illuminated in celebration of victory.

By the time they arrived, at about eight thirty, the performance had already begun. When the President and his party entered, the orchestra interrupted the actors and played "Hail to the Chief," and the audience rose and cheered. Carrying his high silk hat in his left hand, the President led the way up the stairs and along a narrow corridor to the presidential box. The audience continued wildly cheering, and, one witness remembered, "the President stepped to the box rail and acknowledged the applause with dignified bows and never-to-be-forgotten smiles."

The play was a creaky farce about an American bumpkin, Asa Trenchard, who goes to England to claim a fortune he has inherited. He is pursued by a fortune-hunting Englishwoman, Mrs. Mountchessington, who wants to marry him to her daughter. The play had been a hit for years, and the Lincolns appeared to enjoy it.

One of the most predictable crowd pleasers in the play came during the third act, when Mrs. Mountchessington, learning that Asa Trenchard has given away his inheritance, denounces him and makes a haughty exit. Asa's lines read, "Don't know the manners of good society, eh? Well, I guess I know enough to turn you inside out, old gal—you sockdologizing old mantrap." The laughter and burst of applause almost covered the sound of a shot in the presidential box.

John Wilkes Booth had been busy since the night of April 11. Knowing that Jefferson Davis was still at large and that

Johnston's army in North Carolina was still under arms, he devised a plan to give the Confederacy one last chance by decapitating the Union government. Both Lincoln and Andrew Johnson would be killed. Seward would also be murdered. In the disorder that would surely follow, the South might still gain its independence.

Booth had trouble getting his fellow conspirators to go along with his plan. John Surratt, the ablest of his associates, went off on a trip to Canada for his Confederate employers. Arnold favored postponing action and cut loose from Booth's scheme. O'Laughlin, who was willing to take part in a kidnapping, wanted no part of a murder. But Booth still had three devoted followers: Atzerodt, Herold, and Paine.

It was not until midday on April 14, when he learned that Lincoln would be attending Ford's Theatre, that Booth decided to implement his plan. At about eight o'clock he met Atzerodt and Paine and gave them their orders. Atzerodt was to murder Andrew Johnson. The German was terrified. "I enlisted to abduct the President of the United States, not to kill." But under Booth's threats he agreed to consider the assignment. Paine willingly accepted the order to kill Seward. Calling Booth "Captain," he thought of himself as a soldier obeying a superior officer. Because Paine was not familiar with the streets of Washington, Booth directed Herold to show him the way to the house of the Secretary of State. The assassination of the President was left for Booth himself. All three assaults were to take place at 10:15 p.m.

As Atzerodt and Paine fanned out to seek their targets, Booth, familiar to everybody who worked at Ford's Theatre, had no trouble slipping upstairs during the performance of *Our American Cousin*. Moving quietly down the aisle behind the dress circle, he stood for a few moments near the President's box. John Parker, the policeman assigned to protect the President, had left his post in the passageway, and the box was guarded only by Charles Forbes, a White House footman. When Booth showed Forbes his calling card, he was admitted to the presidential box. Barring the door behind him, he noiselessly

moved behind Lincoln, who was leaning forward, with his chin in his right hand and his arm on the balustrade. At a distance of about two feet the actor pointed his derringer at the back of the President's head and pulled the trigger. It was 10:13 p.m.

When Major Rathbone tried to seize the intruder, Booth lunged at him with a razor-sharp hunting knife. "The Knife," Clara Harris reported, "went from the elbow nearly to the shoulder, inside,—cutting an artery, nerves and veins—he bled profusely."

Shoving his victim aside, Booth placed his hands on the balustrade and vaulted toward the stage. It was an easy leap for the gymnastic actor, but the spur on his heel caught in the flags decorating the box, and he fell heavily on one foot, breaking the bone just above the ankle. Waving his dagger, he shouted in a loud melodramatic voice, "*Sic semper tyrannis*" (Thus always to tyrants)—the motto of the state of Virginia. Some in the audience thought he added, "The South is avenged." Quickly he limped across the stage and made his escape through the rear of the theater.

Up to this point the audience was not sure what had happened. But as the blue-white smoke from the pistol drifted out of the presidential box, Mary Lincoln gave a heartrending shriek and screamed, "They have shot the President! They have shot the President!"

The first doctor to reach the box, army surgeon Charles A. Leale, initially thought the President was dead. With his eyes closed and his head fallen forward on his breast, he was being held upright in his chair by Mrs. Lincoln, who was weeping bitterly. Detecting a slight pulse, the physician ordered the President to be stretched out on the floor. Since Lincoln's major wound was at the back of his head, the doctor removed the clot of blood that had accumulated there and relieved the pressure on his brain. Then, by giving artificial respiration, he was able to induce a feeble action of the heart and irregular breathing.

As soon as it was clear that instant death would not occur, the President was moved from the crowded theater. Some wanted to take him to the White House, but Dr. Leale warned that he

would die if jostled on the rough streets of Washington. They decided to carry him across Tenth Street to a house owned by William Petersen, a merchant-tailor. There he was taken to a small narrow room at the rear of the first floor. Finding that Lincoln was too tall for the bed, the doctors placed him diagonally across the mattress, resting his head and shoulders on extra pillows.

Here Lincoln lay for the next nine hours. Attending him were Dr. Leale and Dr. Charles S. Taft, who had also been in the audience for *Our American Cousin*. When Dr. Robert King Stone, the Lincolns' family doctor, arrived at about eleven, he became the physician in charge, and he consulted with Dr. Joseph K. Barnes, the surgeon general of the United States. From the first, all of them knew there was no chance of recovery.

Mary was with her husband through the long night. Frantic with grief, she sat at his bedside, calling on him to say one word to her, to take her with him. When Robert came in, he saw what desperate shape his mother was in and sent for Elizabeth Dixon—wife of Connecticut Senator James Dixon—who was perhaps Mary's closest friend in the capital. Mrs. Dixon persuaded her to retire to the front room of the Petersen house, but Mary returned every hour to her husband's side. On one of these visits she sobbed bitterly, "Oh, that my little Taddy might see his father before he died!" but the physicians wisely decided this was not advisable. Once, when Lincoln's breathing became very stertorous, Mary gave a piercing cry and fell fainting on the floor. Coming in from the adjoining room, Stanton called out loudly, "Take that woman out and do not let her in again."

During the night, as crowds gathered in the street in front of the Petersen house, all the members of the Cabinet except Seward came to see their fallen chief. Vice President Johnson was summoned but was urged not to stay long, knowing that Mary Lincoln detested him. The Reverend Phineas D. Gurley, pastor of the New York Avenue Presbyterian Church, which the Lincolns frequently attended, came to give spiritual comfort.

Stanton promptly took charge. Making an adjacent room in the Petersen house his headquarters, he started an investigation

of the assassination, taking testimony from witnesses, ordering all bridges and roads out of the capital closed, and directing the military to search for the murderers. By dawn he had a massive manhunt under way. He soon learned that there had been not one but two assaults. Though Atzerodt decided not to attack Andrew Johnson, Paine, following Booth's directions, had burst into Seward's house, attacked the invalid Secretary of State, and left him bleeding copiously and barely alive. By morning Paine and Atzerodt were under arrest, and the other conspirators—including those who had only been involved in the kidnapping plot—were promptly seized. But Booth, accompanied by Herold, escaped. Not until April 26 did Stanton's men trace him to a farm in northern Virginia, where he was shot.

Long before that, Lincoln was dead. As the night of April 14–15 wore on, his pulse became feeble. Mary was allowed to return to her husband's side, and, as Mrs. Dixon reported, "she again seated herself by the President, kissing him and calling him every endearing name." As his breath grew fainter, she was led back into the front room. At twenty-two minutes past seven on the morning of April 15, the struggle ended, and the physicians came in to inform her, "It is all over! The President is no more!"

In the small, crowded back room there was silence until Stanton asked Dr. Gurley to offer a prayer. Robert gave way to overpowering grief and sobbed aloud. Standing at the foot of the bed, his face covered with tears, Stanton paid tribute to his fallen chief. "Now," he said, "he belongs to the ages."

Winston Churchill

A Select Edition of

MY EARLY LIFE

by Winston Churchill

"I am Winston Churchill, war correspondent of the Morning Post. I escaped last night from Pretoria. I am making my way to the frontier. Will you help me?"

WINSTON CHURCHILL

ONE

When does one first begin to remember? When do the lights and shadows of dawning consciousness cast their print upon the mind of a child? My earliest memories are of Ireland. I can recall scenes and events in Ireland quite well, yet I left that country early in 1879 when I was just over four years old. My father had gone to Ireland as secretary to his father, the Duke of Marlborough, appointed Lord Lieutenant by Mr. Disraeli in 1876.

I remember my grandfather, the old Duke, unveiling a statue in 1878. A great black crowd, scarlet soldiers on horseback, strings pulling away a brown shiny sheet, the formidable grandpapa talking loudly to the crowd. I recall even a phrase he used: "and with a withering volley he shattered the enemy's line." I quite understood that he was speaking about war and fighting and that a "volley" meant what the soldiers used to do with loud bangs so often in the park where I was taken for my morning walks. This, I think, is my first coherent memory.

Other events stand out more distinctly. My nurse, Mrs. Everest, was nervous about the Irish nationalists, the Fenians. I gathered these were wicked people and there was no end to what they would do if they had their way. On one occasion when I was out riding on my donkey, we thought we saw a long dark procession of Fenians approaching. I am sure now it must have been the Rifle brigade out for a route march. But we were

all very much alarmed, particularly the donkey, who expressed his anxiety by kicking. I was thrown off and had concussion of the brain. This was my first introduction to Irish politics!

My mother, the daughter of the American sportsman and patron of music, Leonard Jerome of New York, was at the time she met my father widely known in New York, Paris and London society as one of the most beautiful girls of the day. Lord Randolph Churchill fell in love with her at first sight, and a few months later they were man and wife. My picture of her in Ireland is in a riding habit, fitting like a skin and often beautifully spotted with mud. She and my father hunted continually on their large horses; and sometimes there were great scares because one or the other did not come back for many hours after they were expected.

My mother always seemed to me a fairy princess: a radiant being possessed of limitless riches and power. She shone for me like the evening star. I loved her dearly—but at a distance. My nurse was my confidante. Mrs. Everest it was who looked after me and tended all my wants. It was to her I poured out my many troubles.

I was first menaced with Education with the arrival of a sinister figure described as "the Governess." In order to prepare for her arrival Mrs. Everest produced a book called *Reading without Tears*. It certainly did not justify its title in my case. We toiled each day. My nurse pointed with a pen at the different letters. I thought it all very tiresome. When the fateful hour struck and the Governess was due to arrive, I did what so many oppressed peoples have done in similar circumstances: I took to the woods. I hid in the extensive shrubberies—forests they seemed—which surrounded our house. Hours passed before I was retrieved and handed over to the Governess.

We continued to toil every day, not only at letters but at words, and also at what was much worse, figures. Letters after all stood together in a certain way one recognized and that meant a word which one uttered when pressed sufficiently. But the figures were tied into all sorts of tangles and did things to one another which it was extremely difficult to forecast with

complete accuracy. The Governess apparently attached enormous importance to the answer being exact. It was not any use being "nearly right." In some cases these figures got into debt with one another: you had to borrow one or carry one, and afterwards you had to pay back the one you had borrowed. These complications cast a steadily gathering shadow over my daily life. They took one away from all the interesting things one wanted to do in the nursery or in the garden. They made increasing inroads upon one's leisure.

Presently, however, a much worse peril began to threaten. I was to go to school. I was now seven years old, and I was what grown-up people in their offhand way called "a troublesome boy." I was to go away from home for many weeks at a stretch in order to do lessons under masters. Although much that I had heard about school had made a disagreeable impression on my mind, an impression thoroughly borne out by the actual experience, I was also excited by this great change in my life. I thought in spite of the lessons, it would be fun living with so many other boys, and that we should have great adventures. Also I was told that "school days were the happiest time in one's life." All the boys enjoyed it. Some of my cousins who were a little older had been quite sorry—I was told—to come home for the holidays. Cross-examined, the cousins did not confirm this; they only grinned.

It was very interesting buying all the things one had to have for going to school. No less than fourteen pairs of socks were on the list. Mrs. Everest thought this was very extravagant. She said that with care ten pairs would do quite well. Still it was a good thing to have some spare, as one could then make sure of avoiding the very great dangers inseparable from "sitting in wet feet."

The school my parents had selected for my education was one of the most fashionable and expensive in the country. It modeled itself upon Eton and aimed at being preparatory for that school. It was supposed to be the very last thing in schools. Only ten boys in a class; electric light (then a wonder); a swimming pond; spacious football and cricket grounds.

It was a dark November afternoon when we arrived at this establishment. We had tea with the headmaster, with whom my mother conversed in the most easy manner. I was pre-occupied with the fear of spilling my cup and so making "a bad start." After all I was only seven.

When the last sound of my mother's departing wheels had died away, I was taken into a form room and told to sit at a desk. All the other boys were out of doors, and I was alone with the form master. He produced a thin greeny-brown-covered book filled with words in different types of print.

"This is a Latin grammar." He opened it at a well-thumbed page. "You must learn this," he said, pointing to a number of words in a frame of lines. "I will come back in half an hour and see what you know."

Behold me then on a gloomy evening, with an aching heart, seated in front of the declension of *mensa*.

Mensa	a table
Mensa	O table
Mensam	a table
Mensae	of a table
Mensae	to or for a table
Mensa	by, with or from a table

What on earth did it mean? Where was the sense of it? It seemed absolute rigmarole to me. However, there was one thing I could always do: I could learn by heart.

In due course the master returned.

"Have you learned it?" he asked.

"I think I can *say* it, sir," I replied; and I gabbled it off.

He seemed so satisfied with this that I was emboldened to ask a question.

"What does it mean, sir?"

"It means what it says. Mensa, a table. You have learned the singular of the first declension."

"Then why does mensa also mean O table," I inquired, "and what does O table mean?"

"Mensa, O table, is the vocative case," he replied. "You would use that in addressing a table." And then seeing he was not carrying me with him, "You would use it in a speaking to a table."

"But I never do," I blurted out in honest amazement.

"If you are impertinent, you will be punished, and punished, let me tell you, very severely," was his conclusive rejoinder.

Such was my first introduction to the classics from which, I have been told, many of our cleverest men have derived so much solace and profit.

Flogging with the birch in accordance with the Eton fashion was a great feature in the school's curriculum. Two or three times a month the whole school was marshaled in the library, and one or more delinquents were haled off to an adjoining apartment and there flogged until they bled freely, while the rest sat quaking, listening to their screams. How I hated this school, and what a life of anxiety I lived there for more than two years. I made very little progress at my lessons, and none at all at games. I counted the days and the hours to the end of every term, when I should return home from this hateful servitude and range my soldiers in line of battle on the nursery floor. The greatest pleasure I had in those days was reading. When I was nine and a half my father gave me *Treasure Island,* and I remember the delight with which I devoured it. My teachers saw me at once backward and precocious, reading books beyond my years and yet at the bottom of the form. Where my reason, imagination or interest were not engaged, I would not or I could not learn, In all the twelve years I was at school no one ever succeeded in making me write a Latin verse or learn any Greek except the alphabet. I do not at all excuse myself for this foolish neglect of opportunities. Perhaps if I had been introduced to the ancients through their history and customs, instead of through their grammar and syntax, I might have had a better record.

I fell into a low state of health at St. James's School, and finally after a serious illness my parents took me away. Our family doctor then practiced at Brighton; in order that I should be under his constant care, I was transferred to a school at

Brighton kept by two ladies, a smaller school than the one I had left, and with an element of kindness and sympathy. At this school I was allowed to learn things which interested me: French, history, lots of poetry by heart, and above all riding and swimming. The impression of those years makes a pleasant picture in my mind, in strong contrast to my earlier school-day memories.

I had scarcely passed my twelfth birthday when I entered the inhospitable regions of examinations. The subjects which were dearest to the examiners were almost invariably those I fancied least. I would have liked to have been examined in history, poetry and writing essays. The examiners, on the other hand, were partial to Latin and mathematics. And their will prevailed. Moreover, I should have liked to be asked to say what I knew. They always tried to ask what I didn't know. When I would have willingly displayed my knowledge, they sought to expose my ignorance. This sort of treatment had only one result: I did not do well in examinations.

This was especially true of my entrance examination to Harrow. The headmaster, Dr. Welldon, however, took a broad-minded view of my Latin prose: he showed discernment in judging my general ability. This was the more remarkable, because I was found unable to answer a single question in the Latin paper. I wrote my name at the top of the page. I wrote down the number of the question "I." After much reflection I put a bracket round it thus "[I}." But thereafter I could not think of anything connected with it that was either relevant or true. I gazed for two whole hours at this sad spectacle; and then merciful ushers collected my piece of foolscap. It was from these slender indications of scholarship that Dr. Welldon drew the conclusion that I was worthy to pass into Harrow. It showed that he was a man capable of looking beneath the surface of things: a man not dependent upon paper manifestations. I have always had the greatest regard for him.

In consequence of his decision, I was in due course placed in the lowest division of the bottom form. My name was in fact

only two from the bottom of the whole school; and these two, I regret to say, disappeared almost immediately through illness or some other cause.

I continued in its unpretentious situation for nearly a year. However, by being so long in the lowest form I gained an immense advantage over the cleverer boys. They all went on to learn Latin and Greek and splendid things like that. But I was considered such a dunce that I could learn only English. Thus I got into my bones the essential structure of the ordinary British sentence—which is a noble thing. And when in after years my schoolfellows who had won prizes and distinction for writing such beautiful Latin poetry and pithy Greek epigrams had to come down again to common English, to earn their living or make their way, I did not feel myself at any disadvantage. Naturally I am biased in favor of boys learning English. I would make them all learn English: and then I would let the clever ones learn Latin as an honor, and Greek as a treat. But the only thing I would whip them for would be for not knowing English.

It was thought incongruous that while I apparently stagnated in the lowest form, I should gain a prize open to the whole school for reciting twelve hundred lines of Macaulay's *Lays of Ancient Rome* without making a single mistake. I also succeeded in passing the preliminary examination for the army while still almost at the bottom of the school. This examination seemed to have called forth a very special effort on my part, for many boys far above me failed in it. I also had a piece of good luck. We knew that among other questions we should be asked to draw from memory a map of some country or other. The night before by way of final preparation I put the names of all the maps in the atlas into a hat and drew out New Zealand. I applied my good memory to the geography of the dominion. Sure enough the first question in the paper was: "Draw a map of New Zealand."

I was now embarked on a military career. This choice was entirely due to my collection of soldiers. I had nearly fifteen hundred, organized as an infantry division with a cavalry

brigade. My brother Jack commanded the hostile army. But by a treaty he was not allowed to have artillery. Very important!

The day came when my father himself paid a formal visit of inspection. All the troops were arranged in the correct formation of attack. He spent twenty minutes studying the scene with a keen eye and captivating smile. At the end he asked me if I would like to go into the army. I thought it would be splendid to command an army, so I said "Yes" at once: and immediately I was taken at my word. For years I thought my father had discerned in me the qualities of military genius. But I was told later that he had only come to the conclusion that I was not clever enough to go to the Bar. He himself had only recently resigned his position as Leader of the House of Commons and Chancellor of the Exchequer, and he still towered in the forefront of politics. However that may be, the toy soldiers turned the current of my life. Henceforward all my education was directed to passing into Sandhurst, and afterwards to the technical details of the profession of arms. Anything else I had to pick up for myself.

I spent nearly four and a half years at Harrow, of which three were in the army class. Meanwhile I found an admirable method of learning my Latin translations. I was always very slow at using a dictionary: it was just like using a telephone directory. It is easy to open it more or less at the right letter, but then you have to turn backwards and forwards and peer up and down the columns and very often find yourself three or four pages the wrong side of the word you want. In short I found it most laborious. But now I formed an alliance with a boy in the sixth form. He was very clever and could read Latin as easily as English. My daily task was perhaps ten or fifteen lines of Latin. This would ordinarily have taken me an hour or an hour and a half to decipher, and then it would probably have been wrong. But my friend could in five minutes construe it for me word by word, and once I had seen it exposed, I remembered it firmly. My friend for his part was almost as much troubled by the

English essays he had to write as I was by these Latin crossword puzzles. We agreed together that he should tell me my Latin translations and that I should do his essays. The arrangement worked admirably. The Latin master seemed quite satisfied with my work, and I had more time to myself in the mornings.

Before I was able to pass into Sandhurst, I met with a very serious accident.

My aunt, Lady Wimborne, had lent us her comfortable estate a Bournemouth for the winter. It was a wild place and through the middle there fell to the sea level a deep cleft called a chine. Across the chine a rustic bridge nearly fifty yards long had been thrown. I was just eighteen and on my holidays. My younger brother aged twelve, and a cousin aged fourteen, proposed to chase me. After I had been hunted for twenty minutes and was rather short of breath, I decided to cross the bridge. Arrived at its center I saw to my consternation that the pursuers had divided their forces. One stood at each end of the bridge; capture seemed certain. But in a flash there came across me a great project. The chine which the bridge spanned was full of young fir trees. Their slender tops reached to the level of the footway. "Would it not," I asked myself, "be possible to leap onto one of them and slip down the polelike stem, breaking off each tier of branches as one descended, until the fall was broken?" I looked at it. I computed it. I meditated. Meanwhile I climbed over the balustrade. My young pursuers stood wonderstruck at either end of the bridge. To plunge or not to plunge, that was the question! In a second I had plunged, throwing out my arms to embrace the summit of the fir tree. The argument was correct; the data were absolutely wrong. The measured fall was twenty-nine feet onto had ground. It was three days before I regained consciousness and more than three months before I crawled from my bed. My father traveled over at full express from Dublin. He brought the greatest of London surgeons with him. I had among other injuries a ruptured kidney. It is to the surgeon's art to my own pronounced will-to-live

that the reader is indebted for this story. But for a year I looked at life round a corner. My father's colleagues made a joke about it at the time:

"I hear Randolph's son met with a serious accident."

"Yes. Playing a game of follow-my-leader."

"Well, Randolph is not likely to come to grief in that way."

In the summer election of 1892 the Unionist Government, of which my father had been a much maligned member, was beaten, and Mr. Gladstone took office. Our family looked forward to the new situation with lively hope. It was thought—vainly, as it turned out—that my father would in Opposition swiftly regain the ascendancy which had been destroyed by his resignation from the Cabinet six years before.

Although little had been said in my hearing, one could not grow up in my father's house without understanding that at that time there had been a great political disaster. Dignity and reticence upon this subject were invariably preserved before strangers, children and servants. Only once did my father lift his visor in my sight. He had reproved me very angrily for disturbing him and, understanding that I was distressed, he took occasion to reassure me. He explained how old people were not always very considerate towards young people, that they were absorbed in their own affairs and might speak roughly in sudden annoyance. Then he proceeded to talk to me in the most wonderful and captivating manner. At the end he said, "Do remember things do not always go right with me. My every action is misjudged and every work distorted. . . . So make some allowances." It was one of the three or four intimate conversations with him which are all I can boast.

During the following year I met at my father's house many of the figures of the parliamentary conflict. Though the business might be ruthless, and the weapons loaded with ball, there was ceremonious personal courtesy and mutual respect. Of course, I saw this gracious side when my father had only intimate friends or persons of high political consequence as his guests. I have heard that on neutral ground he was incredibly

fierce, and affronted people by saying the most blunt or even savage things. Certainly those who did not know him well approached him with caution or heavily armed.

The after-weakness of my accident and these political excitements added to my difficulties with final examinations; nevertheless I qualified after three tries for a cavalry cadetship at Sandhurst. I rejoiced at going to Sandhurst, and at the prospect of becoming a real live cavalry officer in no more than eighteen months: and I busied myself in ordering the considerable necessary outfit of a gentleman cadet.

Up to this time I had been considerably discouraged by my school days, during the whole of which I had enjoyed few gleams of success. I had hardly ever been asked to learn anything which seemed of the slightest use or interest.

In retrospect these years form the only barren and unhappy period of my life. I was happy as a child with my toys in my nursery. I have been happier every year since I became a man. But this interlude of school makes a somber gray patch upon the chart of my journey. It was an unending spell of worries that did not then seem petty, and of toil uncheered by fruition; a time of discomfort, restriction and purposeless monotony.

Except in fencing, in which I had won the public school championship, I had achieved no distinction in nearly twelve years of school. All my contemporaries and even younger boys seemed in every way better adapted to the conditions of our little world. They were far better both at the games and at the lessons. It is not pleasant to feel oneself so completely outclassed and left behind at the very beginning of the race. I had been surprised on taking leave of Dr. Welldon of Harrow to hear him predict, with a confidence for which I could see no foundation, that I should be able to make my way all right. I have always been very grateful to him for this.

TWO

At Sandhurst I had a new start. I was no longer handicapped by past neglect of Latin, French, or mathematics. We had now to learn fresh things and we all started equal. Tactics, fortification, topography, military law and military administration, drill, gymnastics and riding formed the whole curriculum. For the first time I was deeply interested in my work, although I did not much like the drill and indeed figured for several months in the "Awkward Squad," formed from those who required special smartening up.

Our minds were not allowed to roam in working hours beyond a subaltern's range of vision. We dug trenches, constructed breastworks, and made fougasses (a kind of primitive land mine). We cut railway lines, and learned how to blow up masonry bridges, or make substitutes out of pontoons or timber. We drew contour maps of all the hills round Camberley, made road reconnaissances in every direction, and set out picket lines and paper plans for advanced guards or rear guards, and even did some very simple tactical schemes.

Sometimes I was invited to dine at the Staff College, less than a mile away, where all the cleverest officers in the army were being trained for the high command. Here the study was of divisions, army corps and even whole armies. This was thrilling. It did seem such a pity that it all had to be make-believe, and that the age of wars between civilized nations had

come to an end forever. If it had only been a hundred years earlier what splendid times we should have had! Fancy being nineteen in 1793 with more than twenty years of war against Napoleon in front of one! However, all that was finished. In my boyish view the world was growing so sensible and pacific—and so democratic too—that the great days were over.

Horses were the greatest of my pleasures at Sandhurst. I and the group in which I moved spent all our money on hiring horses from the excellent local livery stables. We organized point-to-point races and even a steeplechase in the park of the friendly grandee, and bucketed gaily about the countryside. And here I say to parents, "Don't give your son money. As far as you can afford it, give him horses." No one ever came to grief—except honorable grief—through riding horses. No hour of life is lost that is spent in the saddle. Young men have often been ruined through backing horses, but never through riding them; unless of course they break their necks, which, taken at a gallop, is a very good death to die.

I learned several things at Sandhurst which showed me how to behave and how officers of different ranks were expected to treat one another in the life and discipline of regiment. My company commander, Major Ball, of the Welsh regiment, was a very strict and peppery martinet. Frigidly courteous, punctilious, impeccable, severe, he was held in the greatest awe. It had never been his fortune to go on active service, but we were none the less sure that he would have had to be killed to be beaten.

The rule was, that if you went outside the college bounds, you first of all wrote your name in the company leave-book, and might then assume that your request was sanctioned. One day I drove a tandem over to Aldershot to see a friend in a militia battalion then training there. On my way, whom should I meet but Major Ball himself driving a spanking dogcart home to Sandhurst. As I took off my hat to him, I remembered with a flash of anxiety that I had been too lazy or careless to write my name in the leave-book. However, I thought, "There is still a

chance. He may not look at it until mess; and I will write my name down as soon as I get back." I curtailed my visit to the militia battalion and hastened back to the college as fast as the ponies could trot. It was six o'clock when I got in. I ran along the passage to the desk where the leave-book lay, and the first thing that caught my eyes was the major's initials at the foot of the leaves granted for the day. I was too late. He had seen me in Aldershot and had seen that my name was not in the book. Then I looked again, and there to my astonishment was my own name written in the major's handwriting and duly approved by his initials.

This opened my eyes to the kind of life which existed in the old British army and how the very strictest discipline could be maintained among officers without the slightest departure from the standards of a courteous and easy society. Naturally after such a rebuke I never was so neglectful again.

Once I became a gentleman cadet I acquired a new status in my father's eyes. I was entitled when on leave to go about with him, if it was not inconvenient. He was always amused by acrobats, jugglers and performing animals; and it was with him that I first visited the Empire Theatre. He took me also to important political parties and to stay with his racing friends. He seemed to me to own the key to almost everything worth having. But if ever I began to show the slightest idea of comradeship, he was immediately offended. Once, when I suggested that I might help his private secretary to write some of his letters, he froze me into stone. I know now that this was only a passing phase. Had he lived another four or five years, he could not have done without me.

My course at Sandhurst soon came to an end. I passed out with honors eighth in my batch of a hundred and fifty. I mention this because it shows that I could learn quickly enough the things that mattered. It had been a hard but happy experience. In December 1894 I returned home fully qualified to receive the Queen's commission.

I passed out of Sandhurst into the world. It opened like Aladdin's cave. From the beginning of 1895 down to the present

I have never had time to turn round. I could count almost on my fingers the days when I have had nothing to do. An endless moving picture in which one was an actor. On the whole Great Fun! But the years 1895 to 1900 which are the staple of this story exceed in vividness, variety and exertion anything I have known—except the opening months of the Great War.

Come on now all you young men, all over the world. Twenty to twenty-five! These are the years! You have not an hour to lose. You must take your places in Life's fighting line. Don't be content with things as they are. Enter upon your inheritance, accept your responsibilities. You will make all kinds of mistakes; but as long as you are generous and true, and also fierce, you cannot hurt the world or even seriously distress her. She was made to be wooed and won by youth. She has lived and thrived only by repeated subjugations.

My father died in 1895. All my dreams of comradeship with him, of entering Parliament at his side and in his support, were ended. I knew that he would have received such a suggestion with unaffected amusement; but I had thought of Austen Chamberlain who was allowed to fight at his father's side, and Gladstone's son, and I had dreamed of days to come when Tory democracy would dismiss the "Old Gang" with one hand and defeat the Radicals with the other.

Today Lord Randolph Churchill's place in our political history is measured by the intense impression which his personality made upon his contemporaries. He embodied that force, caprice and charm which so often spring from genius.

Now when I read over all the letters which he wrote to me laboriously with his own hand after the fashion of those days, I feel that I did not at the time appreciate how much he thought and cared for me. More than ever do I regret that we did not live long enough in company to know each other.

There remained for me only to pursue his aims. I was now in the main the master of my fortunes. My mother was always at hand to help and advise; but I was now in my twenty-first year and she never sought to exercise parental control. Indeed

she became an ardent ally, furthering my plans and guarding my interests with all her influence and boundless energy. She was still at forty young, beautiful and fascinating. We worked together on even terms, more like brother and sister than mother and son. And so it continued to the end.

In March 1895 I was gazetted to the 4th Hussars, and began the arduous training of a recruit officer. The 4th Hussars exceeded in severity anything I had previously experienced in military equitation.

Every day long hours were passed in the riding school, at stables or on the barrack square. In those days the newly joined officer was given a recruit's training for the first six months. He rode and drilled afoot with the troopers and received exactly the same instruction and training as they did. At every exercise he had to try to set an example to the men. This was a task not always possible to discharge with conspicuous success. Mounting and dismounting from a barebacked horse at the trot or canter; jumping a high bar without stirrups or even saddle, sometimes with hands clasped behind one's back, brought their inevitable share of mishaps. Many a time did I pick myself up shaken and sore and don again my little gold-braided porkpie cap, fastened on the chin by a bootlace strap, with what appearance of dignity I could command, while twenty recruits grinned furtively but delightedly to see their officer suffering the same misfortunes which it was their lot so frequently to undergo.

Within measure, I am all for youth being made willingly to endure austerities; and for the rest it was a gay and lordly life that now opened upon me. There is a thrill and charm of its own in the glittering jingle of a cavalry squadron maneuvering at the trot; and this deepens into joyous excitement when the same evolutions are performed at a gallop. The stir of the horses, the clank of their equipment, the thrill of motion, the tossing plumes, the sense of incorporation in a living machine, the suave dignity of the uniform—all combine to make cavalry drill a fine thing in itself.

It is a shame that war should have flung all this aside in its greedy, base, opportunist march, and should turn instead to chemists in spectacles, and chauffeurs pulling the levers of airplanes or machine guns. War, which used to be cruel and magnificent, has now become cruel and squalid. But at Aldershot in 1895 none of these horrors had broken upon mankind.

It was a very fine thing in the nineties to see the inspector general maneuver a cavalry division of thirty or forty squadrons as if it were one single unit. When this massive and splendid array was ordered to change front through an angle of perhaps fifteen degrees, the outside brigade had to gallop two miles in a cloud of dust so thick that you could not see even five yards before your face, and twenty falls and half a dozen accidents were the features of a morning's drill. And when the line was finally formed and the regiment or brigade was committed to the charge, one could hardly help shouting in joyous wrath.

Afterwards when we were home in barracks, these enthusiasms in my case were corrected by remembering that the Germans had twenty cavalry divisions each as imposing as this our only darling; and by wondering what would happen if half a dozen spoilsports got themselves entrenched with a Maxim gun and kept their heads.

Then there were splendid parades when Queen Victoria sat in her carriage at the saluting point and when the whole Aldershot garrison, perhaps twenty-five thousand strong, blue and gold, scarlet and steel, passed before her. I wondered why our statesmen did not arrange an international convention whereby all the European powers—France, Germany, Austria and Russia—should be represented in case of war, just as they are at the Olympic Games, by equal teams which should embody all that was best in the race, and so settle the sovereignty of the world. However, the Victorian ministers were very unenterprising; they missed their chance; they simply let was pass out of the hands of the experts and properly trained persons, and reduced it to a mere disgusting matter of Men, Money and Machinery.

Certainly no officer in the Aldershot command in 1895 would have believed that our little army would again be sent to

Europe. Yet there was to come a day when a cavalry captain—Haig by name—who drilled with us in the Long Valley this spring was to feel himself stinted because in a most important battle, he could marshal no more than six hundred thousand men—and could only support them by less than four hundred brigades of artillery.

I wonder often whether any other generation has seen such astounding revolutions of data and values as those through which we have lived. Scarcely anything material or established which I was brought up to believe was permanent and vital has lasted. Everything I was sure was impossible has happened.

At this time I heard that my old nurse, Mrs. Everest, was seriously ill, and I traveled up to London to see her. She knew she was in danger, but her only anxiety was for me. There had been a heavy shower of rain. My jacket was wet. When she felt it with her hands she was greatly alarmed for fear I should catch cold. The jacket had to be taken off and thoroughly dried before she was calm again.

I had return to Aldershot by the midnight train for a very early morning parade. As soon as it was over, I returned to her bedside. She still knew me, but she gradually became unconscious. Death came very easily to her. She had lived such an innocent and loving life of service to others and held such a simple faith, that she had no fears at all, and did not seem to mind very much. She had been my dearest and most intimate friend during the whole twenty years I had lived.

When I think of the fate of poor old women, so many of whom have no one to look after them and nothing to live on at the end of their lives, I am glad to have had a hand in all that structure of pensions and insurance which is especially a help to them.

At the time of my joining the 4th Hussars the British Empire and enjoyed so long a spell of almost unbroken peace that scarcely a captain, hardly ever a subaltern, could be found throughout Her Majesty's forces who had seen even the smallest kind of war. Prowess at polo, or in the hunting field, might

count for something, but the young soldier who had actually been on active service had an aura about him which accorded him spontaneous recognition.

This want of a sufficient supply of active service—so soon to be cured—was therefore acutely felt by my contemporaries and myself. The general peace in which mankind had for so may years languished was broken only in one quarter of the globe. The long-drawn-out guerrilla warfare between the Spaniards and the Cuban rebels was said to be entering upon its most serious phase. As I had a solid block of two and a half months' leave due to me I thought that it might be as well to have a private rehearsal in order to make sure that the ordeal of warfare was one not unsuited to my temperament. Accordingly it was to Cuba that I turned my eyes.

The colonel and the mess generally looked with favor upon any plan to seek professional experience at a seat of war. Excellent introductions to the Spanish military authorities were soon obtained. My father's old friend Sir Henry Wolff, our ambassador at Madrid, assured me that I had only to reach Havana to be warmly welcomed by the captain general and shown all there was to see. At the beginning of November, 1895, I and a brother subaltern, Reginald Barnes, sailed for New York, and journeyed thence to Havana.

We took up our quarters in a fairly good hotel, and presented our credentials to the authorities. Everything worked perfectly. We were treated as an unofficial, but nonetheless important, mission sent at a time of stress by a mighty power and old ally. The more we endeavored to reduce the character of our visit, the more its underlying significance was appraised. We were sent at once to join the column of the captain general, who was on tour inspecting various posts and garrisons. Horses and orderlies were provided and General Valdez welcomed us as honored guests.

Behold next morning a distinct sensation in the life of a young officer! It is still dark, but the sky is paling. We are on our horses, in uniform; our revolvers are loaded. In the half-light long files of armed men are shuffling off towards the

enemy. He may be very near: perhaps he is waiting for us a mile away. We hope devoutly that something will happen, yet at the same time we do not want to be hurt or killed. We know there are very few subalterns in the British army who would not give a month's pay to sit in our saddles.

However, for the moment nothing happened. We marched for several days through wonderful country, without a sight or sound of war. Meanwhile we got quite friendly with our hosts, and managed to acquire some understanding of their views. Hitherto I had (secretly) sympathized with the rebels; but now I began to feel sorry for the Spanish, who here having their beautiful "Pearl of the Antilles" torn away from them.

We did not see how they could win. We knew that Spain was not a rich country. We knew by what immense efforts and sacrifices she maintained more than a quarter of a million men here across five thousand miles of water. And what of the enemy? Somewhere in these forests and mountains were bands of ragged men not ill supplied with rifles and ammunition, to whom war cost nothing except poverty, risk and discomfort. The Spanish forces moved day after day through a world of impalpable hostility, slashed here and there by fierce onslaught.

The thirtieth of November was my twenty-first birthday, and on that morning, as we moved off through a low mist, all of a sudden the rear of the column was involved in firing. The bangs and flashes seemed a furlong away, very noisy and startling. As however no bullets seemed to come near me, I was easily reassured. When we halted for breakfast every man sat by his horse and ate what he had in his pocket. I had been provided with half a skinny chicken. I was engaged in gnawing the drumstick when suddenly, almost in our faces, a ragged volley of firing rang out from the edge of the forest. The horse behind me—not my horse—gave a bound. A party of soldiers rushed to the place from where the volley had been fired, and of course found nothing. Meanwhile I had been meditating on the wounded horse. I could not help reflecting that the bullet which had struck it had passed within a foot of my head. I began to take a more thoughtful view of our enterprise.

All the next day we pursued the trail. That night we slept at the general's headquarters, on hammocks slung in a little barn. I was soon awakened by firing. A bullet ripped through the thatch of our hut, another wounded an orderly just outside. I fortified myself by remembering that the Spanish officer whose hammock was slung between me and the enemy's fire was a man of substantial physique. I have never been prejudiced against fat men. At any rate I did not grudge this one his meals. Gradually I dropped asleep.

After a further day's skirmishing we withdrew across the plain, since our column had now only one more day's rations left. Spanish honor and our own curiosity alike being satisfied, the column returned to the coast, and we to England. We did not think the Spaniards were likely to bring their war in Cuba to a speedy end.

THREE

In the spring of 1896 the 4th Hussars prepared to sail for garrison duty in India in the autumn. We yielded up our horses to some home-coming regiment, so that all cavalry training came to an end. The regiment would remain in the East for twelve or fourteen years, and officers were given the fullest leave and facilities for arranging their affairs.

I now passed a most agreeable six months; in fact they formed almost the only idle spell I have ever had. We played polo at Hurlingham and Ranelagh. I had now five quite good ponies, and was considered to show promise. I gave myself over to the amusements of the London season. In those days English society was a brilliant and powerful body, with standards of conduct and methods of enforcing them now altogether forgotten. In a very large degree everyone knew everyone else and who they were. The few hundred great families, who had governed England for so many generations and had seen her rise to the pinnacle of her glory, were interrelated to an enormous extent by marriage. Everywhere one met friends and kinfolk. The leading figures of society were in many cases the leading statesmen in Parliament, and also the leading sportsmen on the turf. Lord Salisbury was accustomed scrupulously to avoid calling a Cabinet when there was racing at Newmarket, and the House of Commons made a practice of adjourning for the Derby. I moved from one delightful company and scene to another, and passed

the weekends in those beautiful places and palaces which were then linked by their actual owners with the long triumphant history of the United Kingdom. I am glad to have seen, if only for a few months, this vanished world.

I sustained one disturbing experience during this holiday. I was invited, and it was a great honor for a second lieutenant, to join a weekend party given to the Price of Wales. I realized that I must be upon my best behavior—punctual, subdued, reserved—in short, that I must display all the qualities with which I am least endowed. I ought to have caught a six o'clock train to Dorking; but I decided to travel by the seven fifteen instead. This was running things very fine, but all might have been well had the train not been half an hour late. I realized that I should be almost certainly late for dinner. So I proceeded, much to the concern of the gentleman who shared by carriage, to dress in the train between stations. At Dorking I nipped out of the carriage, jumped into the brougham and saw by the speed at which the two horses were being urged that a serious crisis awaited me. However, I thought, "I will slip in and take my place almost unnoticed at the table, and make my apologies afterwards."

When I arrived, the entire company was assembled in the drawing room. The party it seemed without me would be only thirteen. The prejudice of the royal family against sitting down thirteen was well known. The Price had refused point-blank to go in, and would not allow any rearrangement of two tables to be made. He had, as was his custom, been punctual to the minute at half past eight. It was now twelve minutes to nine. There, in the large room, stood this select and distinguished company in the worst of tempers, and there on the other hand was I, a young boy asked as a special favor and compliment. Of course, I had a perfectly good explanation, one that I have frequently had to use since. I had not started soon enough! I put it aside. I stammered a few words of apology, and advanced to make my bow. "Don't they teach you to be punctual in your regiment, Winston?" said the Prince in his most severe tone. It was an awful moment! We went into dinner two by two and sat

down. Fourteen. After about a quarter of an hour the Prince, who was a naturally and genuinely kindhearted man, put me at my ease again by some gracious chaffing remark.

We sailed from Southampton for India in a trooper carrying about twelve hundred men, and after a voyage of twenty-three days were delighted to see the palms and palaces of Bombay lying about us in a wide crescent. A shoal of tiny boats lay around us, and in one of these several of us were rowed to the Sassoon Dock. We came alongside a great stone wall with dripping steps and iron rings for handholds. The boats rose and fell four or five feet with the surges. I put out my hand and grasped at a ring; but before I could get my feet on the steps the boat swung away, giving my right shoulder a sharp and peculiar wrench. I scrambled up all right, hugged by shoulder and soon thought no more about it.

Quite an exceptional strain is required to tear the capsule which holds the shoulder joint together; but once the deed is done, a terrible liability remains. Although my shoulder did not actually go out, I had sustained an injury which was to last me my life; which was to cripple me at polo, to prevent me from ever playing tennis, and to be a grave embarrassment in moments of peril, violence and effort. Since then, at irregular intervals my shoulder has dislocated on the most unexpected pretexts: sleeping with my arm under the pillow, taking a book from the library shelves. Once it very nearly went out through a too expansive gesture in the House of Commons.

However, you never can tell whether bad luck may not after all turn out to be good luck. Perhaps if in the charge of Omdurman I had been able to use a sword, instead of a modern weapon like a Mauser pistol, my story might not have got so far as the telling. One must never forget when misfortunes come that it is quite possible they are saving one from something much worse; or that when you make some great mistake, it may very easily serve you better than the best-advised decision. Life is a whole, and luck is a whole, and no part can be separated from the rest.

The regiment was sent into a rest camp at Poona, and we passed our second night in India in large double-fly tents upon a spacious plain. Daylight brought suave, ceremonious, turbaned applicants for the offices of butler, dressing boy and head groom, which in those days formed the foundation of the cavalry subaltern's household. All bore trustworthy testimonials with them from the home-going regiment; and after brief formalities and salaams laid hold of one's worldly possessions and assumed absolute responsibility for one's whole domestic life. If you liked to be waited on and relieved of home worries, India at this time was perfection. All you had to do was to hand over all your uniforms and clothes to the dressing boy, your ponies to the syce [groom], and your money to the butler. Your Cabinet was complete; each of these ministers entered upon his department with knowledge, experience and fidelity. For a humble wage, justice and a few kind words, they would devote their lives to their task. No toil was too hard, no hours were too long, no dangers too great for their unruffled calm or their unfailing care. Princes could live no better than we.

There then arrived with some commotion a splendid man in a red-and-gold frock coat bearing an envelope with a puissant crest. He was a messenger from the governor, Lord Sandhurst, inviting me and a companion to dine that night at Government House. Thither, after a long day, we repaired, and enjoyed a banquet of glitter, pomp and iced champagne. His Excellency was good enough to ask my opinion upon several matters, and considering the magnificent character of his hospitality, I thought it would be unbecoming in me not to reply fully. I have forgotten the particular points upon which he sought my counsel; all I can remember is that I responded generously. There were indeed moments when he seemed willing to impart his own views; but I thought it would be ungracious to put him to so much trouble; and he very readily subsided. He kindly sent his aide-de-camp with us to make sure we found our way back to camp all right. Next day we had to catch the 5:10 train for our thirty-six-hour journey to Bangalore.

There the British troops were housed in large, cool, colonnaded barracks. No quarters, however, were provided for the officers. We drew instead a lodging allowance which together with pay and other incidentals filled with silver rupees a string net bag as big as a prize turnip. The subaltern receiving his bag of silver at the end of each month cantered home with it to his bungalow, threw it to his beaming butler, and then in theory had no further material cares. It was, however, better to supplement the rewards of the Queen-Empress by an allowance from home three or four times as great. Altogether we received for our services about fourteen shillings a day with about three pounds a month on which to keep two horses. This, with five hundred pounds a year paid quarterly, was my sole means of support: all the rest had to be borrowed from the all-too-accommodating native bankers, very fat, very urbane, quite honest and mercilessly rapacious. These smiling financiers charged two percent *a month* and made quite a good living out of it.

Three of us, pooling all our resources, took a palatial bungalow, all pink and white, with heavy tiled roof and deep verandahs sustained by white plaster columns, wreathed in purple bougainvillea. We built a barn large enough to stable thirty ponies. Our three butlers formed a triumvirate in which no internal dissensions ever appeared.

The serious purpose of our life was expressed in one word—Polo. It was upon this, apart from duty, that all our interest was concentrated. Since it took some time to get a proper stud of ponies together, a regiment coming from home was never expected to count in the Indian polo world for a couple of years. However, our polo club determined upon a bold and novel stroke. It was decided that we should purchase the entire polo stud of twenty-five Arabian ponies possessed by the Poona Light Horse, a native regiment on permanent station, strongly officered by British. I can hardly describe the sustained intensity of purpose with which we trained for our first incursion into India polo. Within six weeks of our landing, the tournament for the Golconda Cup was played in Hyderabad.

Our hosts for the tournament, the 19th Hussars, received us with open arms, and informed us with all suitable condolences that we had had the great misfortune to draw the Golconda Brigade team in the first round. They were sincere when they said what bad luck it was for us, after being so little time in India, to be confronted in our first match with the Golcondas, considered incomparably the best team in southern India.

In the morning we were spectators of a review of the entire garrison. The British troops, the regular Indian troops and the army of the Nizam of Hyderabad paraded and defiled in martial pomp before us. At the end came a score of elephants drawing tandem-fashion gigantic cannon. The elephants saluted as they marched past by raising their trunks with exemplary precision.

In the afternoon there was the polo match. Without going into details which, though important, are effaced by the march of time and greater events, amid roars of excitement from the assembled multitudes we defeated the Golcondas by nine goals to three.

On succeeding days we made short work of all other opponents, and established the record of winning a first-class tournament within fifty days of landing in India.

There were of course also a great many military duties. Just before dawn, every morning, one was awakened by a dusky figure with a clammy hand applying a gleaming razor to one's lathered and defenseless face. By six o'clock the regiment was on parade, and we drilled and maneuvered for an hour and a half before returning for baths and breakfast. Then duties at the stables and orderly room till about eleven o'clock, when all white men were in shelter. We nipped across to luncheon at half past one in blistering heat and then returned to sleep till five o'clock. Now the station begins to live again. It is the hour of Polo. It is the hour for which we have been living all day long. I was accustomed in those days to play every chukker I could get into. I very rarely played less than eight and more often ten or twelve.

As the shadows lengthened over the polo ground, we ambled back perspiring and exhausted to hot baths, rest, and at eight thirty dinner, to the strains of the regimental band and the clinking of ice in well-filled glasses. Thereafter those who were not so unlucky as to be caught by the senior officers to play a tiresome game called whist sat smoking in the moonlight till half past ten or eleven. Such was "the long, long Indian day" as I know it for three years; and not such a bad day either.

It was not until this winter of 1896, when I had almost completed my twenty-second year, that the desire for learning came upon me. I began to feel myself wanting in even the vaguest knowledge about many large spheres of thought. I had picked up a wide vocabulary and had a liking for words and for the feel of words fitting and falling into their places like pennies in the slot. I caught myself using a good many words the meaning of which I could not define precisely.

I knew of course that the youths at the universities were stuffed with erudition at nineteen and twenty. We never set much store by them, remembering that they were only at their books, while we were commanding men and guarding the Empire. Nevertheless I had sometimes resented the apt and copious information which some of them seemed to possess, and I now wished I could find a competent teacher whom I could listen to and cross-examine for an hour or so every day.

So I resolved to read history, philosophy, economics. I wrote to my mother asking for books on these topics. For the next two years I read for four or five hours every day. It was a curious education. I approached it with an empty, hungry mind, and with fairly strong jaws; and what I got I bit.

My various readings during the long glistening middle hours of the Indian day led me to ask myself questions about religion. Hitherto I had dutifully accepted everything I had been told. At Harrow there were three services every Sunday, besides morning and evening prayers throughout the week. All this was very good. I accumulated in those years so fine a surplus in the Bank of Observance that I have been drawing confidently upon

it ever since. Weddings, christenings, and funerals have brought in a steady annual income, and I have never made too close inquiries about the state of my account. It might well even be that I should find an overdraft. But now in these bright days of youth my attendances were well ahead of the Sundays. In the army there was general agreement that if you tried your best to live an honorable life and did your duty and were faithful to friends and not unkind to the weak and poor, it did not matter much what you believed or disbelieved. All would come out right.

However, I now began to read a number of books which challenged my whole religious education. The first of these, a concise and well-written universal history of mankind, dealing in harsh terms with the mysteries of all religions and leading to the depressing conclusion that we simply go out like candles, startled and indeed offended me. But then I found that other notable historians evidently held the same view. For a time I was indignant at having been told so many untruths, as I then regarded them, by the schoolmasters and clergy who had guided my youth. I passed through a violent and aggressive anti-religious phase which, had it lasted, might easily have made me a nuisance. My poise was restored during the next few years by frequent contact with danger. I found that whatever I might think and argue, I did not hesitate to ask for special protection when about to come under the fire of the enemy; nor to feel sincerely grateful when I got home safe to tea. This practice seemed perfectly natural, and just as strong and real as the reasoning process which contradicted it so sharply. Moreover the practice was comforting and the reasoning led nowhere. I therefore acted in accordance with my feelings without troubling to square such conduct with the conclusions of thought.

Indeed it seemed good to let the mind explore so far as it could the paths of thought and logic, and also good to pray for help and succor, and be thankful when they came. I could not feel that the Supreme Creator who gave us our minds as well as our souls would be offended if they did not always run smoothly together in double harness. After all He must have foreseen this from the beginning and of course He would un-

derstand it all. I therefore adopted quite early in life a system of believing whatever I wanted to believe, leaving reason to pursue unfettered whatever paths she was capable of treading.

I was spending a three months' leave in England in 1897 when the revolt of the Pathan tribesmen of the Indian frontier began. I read in the newspapers that a field force of three brigades had been formed, and that at the head of it stood Sir Bindon Blood, an old friend of my father's who had promised to help me see active service. Forthwith I telegraphed reminding him of his promise. I had impressed into my cause Lord William Beresford, a family connection who had won the Victoria Cross in Zululand. He reinforced my appeals to the general. He entertained me at the Marlborough Club before my train left Victoria. These Beresfords had a great air. They made one feel that the world and everyone in it were of fine consequence. I remember the manner in which he announced my purpose to a circle of club friends many years my seniors. "He goes to the East tonight—to the seat of war." "To the East"—the expression struck me. Most people would have said, "He is going out to India"; but to that generation the East meant the gateway to the adventures and conquests of England. "To the front?" they asked. Alas, I could only say I hoped so and catch the returning Indian mail steamer.

Arriving in India, I found good news awaiting me at Bombay. General Sir Bindon Blood's message was: VERY DIFFICULT. NO VACANCIES. COME UP AS A CORRESPONDENT. WILL TRY TO FIT YOU IN. B.B.

I had first of all to obtain leave from my regiment at Bangalore. The colonel was indulgent. I was told that I could go and try my luck with the Malakand Field Force. Meanwhile I had been commissioned as war correspondent by the *Pioneer* newspaper, and my mother had also arranged in England that my letters should be simultaneously published in the *Daily Telegraph,* for which that journal was willing to pay five pounds a column. This was not much, considering that I had to pay all

my own expenses. Armed with these credentials and my telegram from Sir Bindon Blood, I sped to the Bangalore railway station and bought a ticket for Nowshera. The Indian clerk, having collected from me a small sack of rupees, pushed a ticket through a pigeonhole. I had the curiosity to ask how far it was. The polite Indian consulted a railway timetable and impassively answered 2,028 miles. Quite a big place, India! This meant a five days' journey in the worst of the heat.

I broke my journey for a night and day at Rawalpindi where I had a subaltern friend in the 4th Dragoon Guards. After dinner we repaired to the sergeants' mess, where a spirited singsong was in progress. Few things recall the past so potently as a tune. I have got tunes in my head for every war I have been to, and indeed for every critical or exciting phase in my life. Some day when my ship comes home, I am going to have them all collected in Gramophone records, and then I will sit in a chair and smoke my cigar, while pictures and faces, moods and sensations long vanished return; and pale but true there gleams the light of other days. I remember well the songs the soldiers sang on this occasion. There was a song about some shocking invention which had just been made enabling photographs to be taken through a screen or other obstruction.

The inside of everything you see,
A terrible thing, an 'orrible thing, is the new photographee.

Of course we treated it all as a joke, but afterwards I read in the newspaper that they might some day even be able to see the very bones in your body! Then there was the song, the chorus of which was:

And England asks the question
When danger's nigh
Will the sons of India do or die?

and naturally a reassuring answer was forthcoming. But the best of all was:

Great White Mother, far across the sea,
Ruler of the Empire may she ever be.
Long may she reign, glorious and free,
In the Great White Motherland.

I felt much uplifted by these noble sentiments especially after having been spaciously entertained at the regimental mess.

From the railhead at Nowshera it was a forty-mile trip across the plains by tonga—a kind of little cart drawn by relays of galloping ponies—to Sir Bindon Blood's field headquarters. Yellow with dust I presented myself at the staff office. The general was away.

I endeavored to turn Sir Bindon Blood's absence to the best advantage. I acquired an entirely new faculty. Until this time I had never been able to drink whisky. I liked wine, especially champagne; and on very special occasions I could even drink a small brandy and soda, the drink of my father's era. But this whisky I had never been able to face. I now found myself in heat which was terrific, with absolutely nothing to drink, apart from tea, except either tepid water or tepid water with lime juice or tepid water with whisky. Faced with these alternatives I "grasped the larger hope." Wishing to fit myself for active-service conditions, by the end of five days I overcame completely my repugnance to the taste of whisky. Nor was this a momentary acquirement. On the contrary the ground I gained in those days I have firmly entrenched, and held throughout my whole life. To this day, although I have always practiced true temperance, I have never shrunk when occasion warranted it from the main basic standing refreshment of the white officer in the East.

I had also in these five days to fit myself out in all respects for the approaching movement of our force. I had to buy two good horses, engage a military syce, and complete my martial wardrobe in many particulars. Unluckily for them, but very conveniently for me, several officers had been killed in the preceding week, and their effects were, in accordance with Anglo-Indian campaigning custom, sold by auction as soon as the funeral (if any) was over. Here was much the best market. The camp auc-

tioneer realized far better prices than any widow or mother could have. Still I must admit that I felt a pang when a few weeks later I first slung round my shoulder the lanyard of a gallant friend I had seen killed the day before.

Campaigning on the Indian frontier is an experience by itself. Neither the landscape nor the people find their counterparts in any other portion of the globe. Valley walls rise steeply five or six thousand feet on every side. The columns crawl through a maze of giant corridors down which fierce snow-fed torrents foam under skies of brass. Amid these scenes of savage brilliancy there dwells a race whose qualities seem to harmonize with their environment. Except at harvesttime, when self-preservation enjoins a temporary truce, the Pathan tribes are always engaged in private or public war. Every man is a warrior; every house is a fortress; every family cultivates its vendetta; every clan, its feud. The life of the Pathan is thus full of interest; and his valleys, nourished alike by endless sunshine and abundant water, are fertile enough to yield with little labor the modest material requirements of sparse populations.

Into this happy world the nineteenth century brought two new facts: the breech-loading rifle and the British Government. The first was an enormous luxury and blessing; the second, an unmitigated nuisance. The convenience of the breech-loading rifle was nowhere more appreciated than in the Indian highlands. A weapon which would kill with accuracy at fifteen hundred yards opened a whole new vista of delights to every family or clan which could acquire it. From one's own house one could fire at one's neighbor nearly a mile away. One could lie in wait on some high crag; and at hitherto unheard-of ranges hit a horseman far below. Fabulous prices were therefore offered for these glorious products of science. Rifle thieves scoured all India to reinforce the efforts of the honest smuggler. A steady flow of the coveted weapons spread its genial influence throughout the frontier, and the respect which the Pathan tribesmen entertained for Christian civilization was vastly enhanced.

The action of the British Government on the other hand was entirely unsatisfactory. That great organizing, advancing, absorbing power was a monstrous spoilsport. If the Pathans made forays into the plains, not only were they driven back (which after all was no more than fair), but a whole series of subsequent interferences took place; expeditions toiled laboriously through the valleys, scolding the tribesmen and exacting fines for any damage which they had done. No one would have minded these expeditions if they had simply come, had a fight and then gone away again. But these intruders began to make roads through many of the valleys. All along the road people were expected to keep quiet, not to shoot one another, and above all not to shoot at travelers along the road. It was too much to ask, and a whole series of quarrels, including the one in which we were now to engage, took their origin from this source.

Our march led us past the mouth of the Mamund Valley, a pan-shaped plain nearly ten miles broad. No dispute existed between us and the Mamunds. Their reputation was pestilential, and the greatest care was taken to leave them alone. But our twinkling campfires offered a target too tempting for human nature as developed on the Indian frontier to resist. Sniping by individuals was inevitable and began after dark upon the camp of our leading brigade. No great harm was done. A few men were wounded. Sir Bindon Blood continued his dinner impassively, although at one moment we had to put out the candles. In the morning, overlooking the Mamund impudence, we marched on. But the tribesmen were now excited, and when our second brigade arrived two days later, hundreds of men, armed with every kind of weapon from the oldest flintlock to the latest rifle, spent three exhilarating hours in firing continuously into the crowded array of men and animals. This night's sport cost about forty officers and men, and many horses and pack animals besides. On this being reported, Sir Bindon Blood sent orders to General Jeffreys commanding the second brigade to enter the valley on the following day and chastise the truculent Mamunds: to march up their valley, which is a cul-de-sac, to its extreme point, destroying all the crops, breaking the reservoirs

of water, blowing up as many castles as time permitted, and shooting anyone who obstructed the process. "If you want to see a fight," said Sir Bindon to me, "you may ride back and join Jeffreys." I availed myself of an escort of Bengal Lancers which was returning to the second brigade headquarters.

Next day at earliest dawn our whole brigade, preceded by a squadron of Bengal Lancers, marched in warlike formation into the Mamund Valley. There were three separate detachments, each of which had its own punitive mission to fulfill. As these diverged fanwise, and as our total number did not exceed twelve hundred fighting men, we were all soon reduced to quite small parties. I attached myself to the center column whose mission it was to proceed to the farthest end of the valley. I began by riding with the cavalry.

We got to the head of the valley without a shot being fired. As we approached the mountain wall our field glasses showed us clusters of tiny figures gathered on a conical hill. It was settled that a company of Sikhs should attack a village of a few mud huts whose roofs cold be seen amid the boulders and waving Indian corn of the mountainside. The cavalry meanwhile would guard the plain and keep connection with the reserve of our force.

I gave my pony to a native and began to toil up the ridge towards the village with the Sikhs. It was frightfully hot. We plodded and stumbled upwards for nearly an hour. A few shots were fired from higher up the mountain; but otherwise complete peace seemed to reign. As about eleven o'clock, as I paused to mop my brow, it struck me that there were no troops to be seen. Where was our army? They had marched out twelve hundred strong only a few hours ago, and now the valley had swallowed them all up. I took out my glasses and searched the plain. It occurred to me for the first time that we were a very small party: five British officers including myself, and probably eighty-five Sikhs. Like most young fools I was looking for trouble, and only hoped that something exciting would happen. It did!

When our company reached the village we found it deserted. I lay down with an officer and eight Sikhs on the side of

the village towards the mountain, while the remainder of the company rummaged about the mud houses. While we lay there the captain of the company came up with orders.

"We are going to withdraw," he said to the subaltern. "You stay here and cover our retirement till we take up a fresh position on the knoll below the village." He added, "The colonel things we are rather in the air here."

It struck me this was a sound observation. But all was quiet until the company had been withdrawn. Then suddenly, before we could join them, the mountainside sprang to life. Swords flashed from behind rocks, bright flags waved here and there. A dozen widely scattered white smoke puffs broke in front of us. Loud explosions resounded close at hand. From high up on the crag, two or three thousand feet above us, white or blue figures appeared, dropping down the mountainside from ledge to ledge. A shrill crying arose from many points. The whole hillside began to be spotted with smoke, and hostile figures continued to flow down the mountainside, and scores began to gather in rocks about a hundred yards away from us. The targets were too tempting to be resisted. I borrowed the rifle of the Sikh by whom I lay. He was quite content to hand me cartridges. I began to shoot carefully. We had found the adventure for which we had been looking.

An English voice spoke close behind. It was the battalion adjutant.

"Come on back now. We can cover you from the knoll."

The Sikh whose rifle I had borrowed had put eight or ten cartridges on the ground beside me. It was a standing rule to let no ammunition fall into the hands of the tribesmen, so I handed him the cartridges, one after the other, to put in his pouch. This was a lucky inspiration, for as the rest of our party got up and turned to retreat, there was a ragged volley from the rocks. I thought for the moment that five or six of our men had lain down again. So they had: two killed and three wounded.

It is a point of honor on the Indian frontier not to leave wounded men behind. Death by inches and hideous mutilation

are the invariable measure meted out to all who fall in battle into the hands of the Pathan tribesmen. Back came the adjutant, with several soldiers. We all laid hands on the wounded and began to carry and drag them away down the hill. We emerged upon a bare strip of ground where the captain commanding the company stood with half a dozen men. Below was the knoll on which a supporting party should have been posted. No sign of them! We hustled across the open space making for the knoll lower down. Then twenty or thirty furious figures appeared among the houses, firing frantically or waving their swords.

There was still about three-quarters of a mile of the ridge to traverse before the plain was reached, and on each side of us other ridges ran downwards. Along these rushed our pursuers, striving to cut us off and firing into both our flanks. We fetched up at the bottom little better than a mob, but still with our wounded.

The survivors of the company were now drawn up two deep, shoulder to shoulder, while the tribesmen, who must have now numbered three hundred, gathered in a wide and spreading half-moon around our flanks. Above the din and confusion the captain ordered the company to cease their wild and ragged fusillade. Then he gave the order to fire. Crash! At least a dozen tribesmen fell. Another volley, and they wavered. A third, and they began to withdraw up the hillside. The bugler began to sound the "Charge." Everyone shouted. The crisis was over.

Our orders the next day were to lay wasted the Mamund Valley with fire and sword in vengeance. This accordingly we did, in the following days. So long as the villages were in the plain, this was quiet easy. When, however, we had to attack the villages on the sides of the mountains they resisted fiercely, and we lost for every village two or three British officers and fifteen or twenty native soldiers. Whether it was worth it, I cannot tell. At any rate, at the end of a fortnight the valley was a desert, and honor was satisfied.

* * *

I had hoped to be permanently attached to the frontier forces and to roam these valleys for some time to come. I did indeed get through three or four more skirmishes, which I cannot dignify with the name of actions; but my own colonel far away in southern India began to press for my return before the campaign was concluded. So in spite of my utmost efforts to remain with Sir Bindon Blood, I finished up a Bangalore. I consoled myself with the thought that a larger expedition was forming for a campaign in the spring, and that I might then be able to join them. The operations, however, dissolved in prolonged negotiations, and finally resulted in a lasting peace, the wisdom of which as a budding politician I was able to approve.

During this winter I wrote my first book. I learned from England that my letters to the *Daily Telegraph* had been well received. Taking these letters as the foundation, I resolved to write the story of the expedition. I soon experienced a real pleasure in the task of writing, and the three or four hours in the middle of every day, often devoted to slumber or cards, saw me industriously at work. The manuscript was finished shortly after Christmas and sent home to my mother to sell. She arranged for its publication.

The Malakand Field Force had an immediate and wide success. When the first bundle of reviews reached me together with the volume as published, I was filled with pride and pleasure. The reader must remember I had never been praised before. The only comments which had ever been made upon my work at school had been "Indifferent," "Untidy," "Slovenly," "Bad," "Very Bad," etc. Now here were the erudite critics writing whole columns of praise! I was thrilled. I knew that if this would pass muster there was lots more where it came from, and I felt a new way of making a living, and of asserting myself, opening splendidly out before me. I saw that even this little book had earned me in a few months two years' pay as a subaltern. I resolved that as soon as the wars which seemed to have begun again in several parts of the world should be ended, and we had won the Polo Cup, I would free myself from all discipline and authority, and set up in perfect independence in

England with nobody to give me orders or arouse me by bell or trumpet.

One letter which I received gave me extreme pleasure, and I print it here as it shows the extraordinary kindness and consideration for young people which the Prince of Wales always practiced.

> Marlborough House,
> April 22/98.
>
> My dear Winston,
>
> I cannot resist writing a few lines to congratulate you on the success of your book! I have read it with the greatest possible interest and I think the descriptions and the language generally excellent. Everybody is reading it, and I only hear it spoken of with praise. Having now seen active service you will wish to see more, and have as great a chance I am sure of winning the V.C. as Fincastle had; and I hope you will not follow the example of the latter, who I regret to say intends leaving the Army in order to go into Parliament.
>
> You have plenty of time before you, and should certainly stick to the Army before adding M.P. to your name.
>
> Hoping that you are flourishing,
> I am,
> Yours very sincerely,
> A.E.*

The fighting on the Indian frontier had scarcely closed before the rumors of a new campaign in the Sudan began to ripen into certainty. The power of the dervish Khalifa, at Omdurman, had throughout the latter half of the century frustrated British aspirations in this area. British resentment had been aroused, in 1885, by the slaying of General Gordon at Khartoum. The determination of Lord Salisbury's government to advance to Khartoum,

*Albert Edward; afterwards King Edward VII.

crush the dervish power and liberate these immense regions from its withering tyranny, was openly avowed. Sir Herbert Kitchener with a British and Egyptian force of about twenty thousand men had already advanced up the Nile, and had in a fierce action destroyed the army of Mahmud, the Khalifa's lieutenant, which had been sent to oppose him. There remained only the final phase of the long drama of the Sudan—the advance two hundred miles southward to the dervish capital and the decisive battle with the whole strength of the dervish empire.

I was deeply anxious to share in this.

But now I began to encounter resistances of a new and formidable character. When I had first gone into the army, and wanted to go on active service, nearly everyone had been friendly and encouraging. I now perceived that there were many ill-disposed people who did not take a favorable view of my activities. They began to say things like this: "Who the devil is this fellow? How has he managed to get to these different campaigns? How does he get so much leave from his regiment? Look at all the hardworking men who have never stirred an inch from the daily round and common task. What Second Lieutenant Churchill requires is a long period of discipline and routine." The expressions "medal-hunter" and "self-advertiser" were even used from time to time in some high and some low military circles in a manner surprising and painful. It is melancholy to be forced to record these less amiable aspects of human nature, which by a most curious and indeed unaccountable coincidence have always seemed to present themselves in the wake of my innocent footsteps.

At any rate, quite early in the process of making my arrangements to take part in the Sudan campaign, I became aware of the unconcealed disapproval of the sirdar of the Egyptian army, Sir Herbert Kitchener. My application to join that army, though favored by the War Office, was refused, while several other officers of my service and rank were accepted. It was clear that the refusal came from the highest quarter. As I was at the time entitled to a period of leave, I decided to proceed without delay to the center of the Empire and argue the matter out in London.

A portrait of the first Duke of Marlborough, Churchill's great ancestor.

Blenheim Palace, the Duke's residence at Woodstock, Oxfordshire.

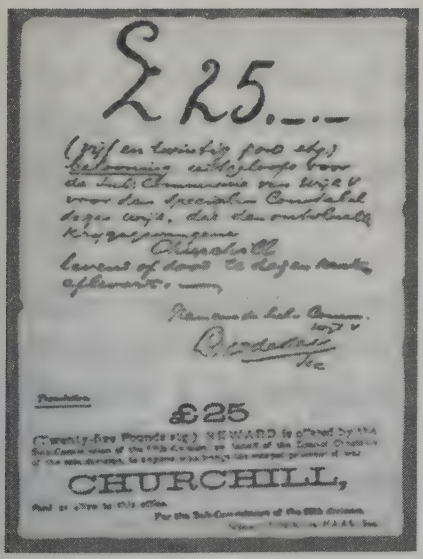
The son of remarkable parents, Lord Randolph Churchill and the former Jennie Jerome of New York, Churchill retained strong memories of his childhood throughout his life.

The bed in which he was born, November 30, 1874, and the earliest known picture of him.

A typical Harrow classroom. While being "menaced with Education," Churchill looked the typical schoolboy: left, at about age six; below, as he appeared in formal school attire.

As a young cadet at Sandhurst, above left, Churchill looked forward to an exciting career in military service. Below left, he is shown in the uniform of the 4th Hussars; below right, as a member of the South African Light Horse.

Above, Churchill as a prisoner of the Boers, in garrison cap at right. Below left is a poster offering a reward of £25 for his capture "dead or alive." Below right, Churchill escaped and arrived safely in Durban to a hero's welcome.



The last memorable battle of the Boer War in which Churchill took part was the relief of the beleaguered town of Ladysmith. Below, a leader of the garrison of Ladysmith greets his rescuers. Such war exploits, as well as the numerous newspaper accounts that he had written, earned Churchill widespread popularity in England. Soon after his return there at the age of twenty-five, he sought and won a seat in Parliament. Left, he is shown as a young M.P., accompanied by his mother.

On reaching London I mobilized whatever resources were within my reach. My mother devoted the whole of her influence to furthering my wishes. She even went so far as to write personally to Sir Herbert Kitchener, whom she knew quite well, on my account. But all without avail!

At this moment a quite unexpected event occurred. Lord Salisbury, the Prime Minister, became interested in my writings and formed a wish to meet their author. I paid him a visit at the Foreign Office, entering for the first time that spacious room overlooking the Horse-guards Parade in which I was afterwards to see so much grave business done in peace and war.

We talked for half an hour, and when he finally conducted me again across the wide expanse of carpet to the door, he dismissed me in the following terms, "If there is anything at any time that I can do which would be of assistance to you, pray do not fail to let me know."

After several days' consideration I had recourse to his private secretary. I did not want to put the old gentleman to trouble on my account, but there seemed no other way of reaching Egypt. The private secretary went off at once in search of his chief. Before darkness closed a telegram had gone to Kitchener to the effect that the Prime Minister would be greatly pleased on personal grounds if my wish to take part in the impending operations could without disadvantage to the public service be acceded to.

Several days later I received the following laconic communication from the War Office:

> You have been attached as a supernumerary lieutenant to the 21st Lancers for the Sudan campaign. You are to report at once at the Abassiyeh Barracks, Cairo. . . . It is understood that you will proceed at your own expense and that in the event of your being killed or wounded in the impending operations, or for any other reason, no charge of any kind will fall on British army funds.

Feeling the force of Napoleon's maxim that "war should support war," I arranged that night with a great friend of mine,

the son of the proprietor of the *Morning Post,* that I should write as opportunity served a series of letters at fifteen pounds a column. The president of the Psychical Research Society extracted from the rather unseasonable promise to "communicate" with him should anything unfortunate occur. My mother waved me off in gallant style. Six days later I was in Cairo.

All was excitement and hustle at Abassiyeh Barracks. Two squadrons of my regiment had already started up the Nile. The other two were to leave the next morning.

The movement of the 21st Lancers fourteen hundred miles into the heart of Africa was effected with the swiftness, smoothness and punctuality which in those days characterized all Sir Herbert Kitchener's arrangements. We were transported by train to Asyut; then by stern-wheeled steamers to Aswan. We led our horses round the cataract of the Nile at Philae, reembarked on other steamers and voyaged four days to a railhead, and from there proceeded four hundred miles across the desert by the marvelous military railway whose completion had sealed the fate of the dervish power. A fortnight after leaving Cairo we arrived in the camp and railway base of the army, where the waters of the Atbara flow into the mighty Nile, then journeyed forward by the nine days' march to the advanced camp. Omdurman was not only eighteen miles away.

Nothing like the Battle of Omdurman will ever be seen again. It was the last of those spectacular conflicts whose vivid and majestic splendor has done so much to invest war with glamour. Everything was visible to the naked eye, and then dissolved in a shimmer of unreality and illusion. Batteries of artillery or long columns of cavalry emerged from a filmy world of uneven crystal onto the hard yellow-ochre sand, and took up their positions amid jagged red-black rocks with violet shadows. Over all the immense dome of the sky, pierced by the flaming sun, weighed hard and heavy on marching necks and shoulders.

On August 28 we set forth on our final advance in full order of battle. I was not until towards nine o'clock of September 1

that our patrols began to see things. Reports trickled through of white patches and gleams of light amid the mirage glitter which shrouded the southern horizon. The squadron to which I belonged was supporting the advanced screen, and we rode slowly forward with growing excitement. Soon we topped a broad swell of sand and saw before us, scarcely a mile away, all our advanced patrols and parties halted in a long line, observing on the distant horizon something which looked like a forest of thornbushes. Soon the momentous news came back to us: "Enemy in sight. Quite a good army."

That morning I had occasion to see from an eminence the British and Egyptian army advancing in battle array. The sight was truly magnificent. Five sold brigades of three or four infantry battalions each, marching in open columns, echeloned back from the Nile. Behind these great blocks of men followed long rows of artillery, and beyond these there trailed out interminable strings of camels carrying supplies. On the river moved masses of heavily laden sailing boats towed by a score of sternwheel steamers and seven or eight large white gunboats ready for action. On the desert flank the columns of the camel corps completed the spacious panorama.

The opposing forces halted at some distance from each other, and the dervish army after giving a tremendous *feu de joie* seemed to settle down for the night. We watched them all the afternoon and evening, and our patrols skirmished and scampered about with theirs. It was not until the light faded that we returned to the Nile and were ordered to make camp under the steep bank of the river.

In this sheltered but helpless posture we were informed that trustworthy news had been received that the enemy would attack by night. The most severe penalties were denounced against anyone who in any circumstances whatever—even to save his life—fired a shot inside the perimeter of the camp. If the dervishes broke the line and penetrated the camp, we were to defend ourselves by fighting on foot with our lances or swords. With full confidence in the plan of using cavalry swords and lances on foot amid the sand dunes against a

dervish mob in pitch darkness, we addressed ourselves to preparations for dinner.

This kind of war was full of fascinating thrills. It was not like the Great War. Nobody expected to be killed. Here and there in every regiment or battalion, half a dozen, a score, at the worst thirty or forty, would pay the forfeit; but to the great mass of those who took part in the little wars of Britain in those vanished lighthearted days, this was only a sporting element in a splendid game.

Everything depends upon the scale of events. We young men who lay down to sleep that night within three miles of sixty thousand well-armed fanatical dervishes, expecting every moment their violent onset or inrush and sure of fighting at latest with the dawn—we may perhaps be pardoned if we thought we were at grips with real war.

Long before the dawn we were astir, and by five o'clock the 21st Lancers were drawn up mounted outside the camp. I was called out from my troop to advance with a patrol and reconnoiter the ridge between the dervish encampment and the river. I took six men and a corporal. We trotted fast over the plain and soon began to breast the unknown slopes. Was the ridge held by the enemy? Were we riding through the gloom into thousands of ferocious savages? Every step might be deadly; yet there was no time for overmuch precaution. The regiment was coming on behind us, and dawn was breaking. For cool, tense excitement I commend the quarter of an hour before the curtain is lifted upon an unknowable situation.

Now we have reached the crest line. We can see more than half a mile. *They are there!* The enormous black smears below us are thousands of men; the shimmering in the distant plain is the glinting of their weapons.

A glorious sunrise is taking place behind us. It is already light enough to use field glasses. The masses define themselves into ordered ranks bright with glittering weapons, and above them dance a multitude of gorgeous flags. We see for ourselves what the Crusaders saw. I slip off my horse; I write in my field-

service notebook: "The dervish army is still in position." I send this message by the corporal direct to the commander in chief. This is no place for Christians. We scamper off. The enemy come on like the sea.

The whole of the Khalifa's army, nearly sixty thousand strong, advancing in battle order from their encampment of the night before, topped the swell of ground which hid the two armies from one another, and then rolled down the gently sloping amphitheater in the arena of which Kitchener's twenty thousand troops were dawn up shoulder to shoulder to receive them. Ancient and modern confronted one another. The weapons, the methods and fanaticism of the Middle Ages were brought by an extraordinary anachronism into dire collision with the organization and inventions of the nineteenth century.

The result was not surprising. As the successors of the Saracens swept down the long smooth slopes, they encountered the rifle fire of our infantry, supported by at least seventy guns on the riverbank of the Nile and in the gunboats. The whole attack withered and came to standstill at least seven hundred yards away from the British-Egyptian line, with a loss of at least six thousand men. The dervish army, however, possessed nearly twenty thousand rifles of various kinds, and when the spearmen could get no farther, these riflemen lay down on the plain and began a ragged, unaimed fusillade. In the short space that this lasted perhaps two hundred casualties occurred among our troops.

Seeing that the attack had been repulsed, and that he was nearer to Omdurman than the dervish army, Kitchener immediately wheeled his five brigades into echoelon formation and proceeded to march towards the city, intending to cut off what he considered to be the remnants of the service army from their capital. But the whole dervish left, having overshot the mark, had not even been under fire, and their reserves, perhaps fifteen thousand men, were still intact. These swarms now advanced with undaunted courage to attack the British and Egyptian forces, which were no longer drawn up in a prepared position, but marching freely over the desert. This second shock was far

more critical than the first. The charging dervishes succeeded everywhere in coming to within a hundred or two hundred yards of the troops, and our rear brigade of Sudanese, attacked from two directions, was only saved from destruction by the skill and firmness of is commander, General Hector Macdonald. However, discipline and machinery triumphed over the most desperate valor, and after an enormous carnage, certainly exceeding twenty thousand men, who strewed the ground in heaps, the whole mass of the dervishes dissolved into fragments and streamed away into the mirages of the desert.

My regiment, the 21st Lancers, were the only horsemen on the left flank nearest to Omdurman. Immediately after the first attack had been repulsed we were ordered to ascertain what enemy forces, if any, stood between Kitchener and city, and if possible drive these forces back and clear the way for the advancing army. We ascended again the ridge which had played its part in the first stages of the action, and soon saw before us the whole plain of Omdurman with the vast mud city, its minarets and domes, spread before us six or seven miles away. After various halts and reconnoiterings we found ourselves walking forward in "columns of troops." There are four troops in a squadron, and for squadrons in a regiment. I commanded the second troop from the rear, between twenty and twenty-five men.

Everyone expected that we were going to make a charge. In one respect a cavalry charge is very like ordinary life. So long as you are all right, firmly in your saddle, your horse in hand, and well armed, lots of enemies will give you a wide berth. But as soon as you have lost a stirrup, have dropped your weapon, are wounded, then is the moment when from all quarters enemies rush upon you.

But where was the enemy? We continued to pace forward over the hard sand in a high state of suppressed excitement. Presently I noticed, three hundred yards away on our flank and parallel to the line on which we were advancing, a long row of blue-black objects, two or three yards apart. I thought there were about a hundred and fifty. Then I became sure that these

were men—enemy men—squatting on the ground. Almost at the same moment the trumpet sounded "Trot," and the whole long column of cavalry began to jingle and clatter across the front of these crouching figures. Forthwith from every blue-black blob came a white puff of smoke, and a loud volley of musketry rang out. Such a target at such a distance could scarcely be missed, and all along the column here and there horses bounded and a few men fell. The trumpet sounded "Right wheel into line," and all the troops of the regiment swung round towards the riflemen. Almost immediately the regiment broke into a gallop, and the 21st Lancers were committed to their first charge in war!

The impression of what happened to me is clear and vivid in my mind to this day. The troop I commanded was, when we wheeled into line, second from the right of the regiment. I was riding a handy, sure-footed, gray Arab polo pony. I saw immediately before me, and now only half the length of a polo ground away, the row of crouching blue figures firing frantically, wreathed in white smoke. On my right and left my neighboring troop leaders made a good line. Immediately behind was a long dancing row of lances crouched for the charge. We were going at a fast gallop. There was too much trampling and rifle fire to hear any bullets. After a glance to the right and left and at my troop, I looked again towards the enemy. The scene appeared to be suddenly transformed. The blue-black men were still firing, but behind them there now came into view a depression like a shallow sunken road, crowded with men rising up from the ground. Bright flags appeared as if by magic. The dervishes, ten or twelve deep at the thickest, filled the dry watercourse, a great gray mass gleaming with steel. In the same twinkling of an eye I saw also that our right overlapped their left, that the troop on my right would charge into air. My subaltern comrade on the right could see the situation too; and we both increased our speed to the very fastest gallop and curved inwards like the horns of the moon. One really had not time to be frightened or to think of anything but the particular neces-

sary actions which I have described. They completely occupied mind and senses.

The collision was now very near. I saw immediately before me, not ten yards away, two men lying in my path. They were perhaps a couple of yards apart. I rode at the interval between them. The both fired. I passed through the smoke conscious that I was unhurt. The trooper immediately behind me was killed at this moment. As the ground began to fall away beneath my pony's feet, the clever animal dropped like a cat four or five feet down onto the sandy bed of the watercourse, and in this sandy bed I found myself surrounded by what seemed to be dozens of men. They were not thickly packed enough at this point for me to experience any actual collision with them. Whereas the troop next but one on my left was brought to a complete standstill and suffered very heavy losses, we seemed to push our way through as one has sometimes seen mounted policemen break up a crowd. In less time than it takes to relate, my pony scrambled up the other side of the ditch. I looked around.

Once again I was on the hard, crisp desert, my horse at a trot. I had the impression of scattered dervishes running to and fro in all directions. Straight before me a man threw himself on the ground. The reader must remember that I had been trained as a cavalry soldier to believe that if ever cavalry broke into a mass of infantry, the latter would be at their mercy. My first idea was that the man was terrified. But simultaneously I saw the gleam of his curved sword as he drew it back for a hamstringing cut. I had room and time enough to turn my pony out of his reach. As I straightened myself in the saddle, I saw before me another figure with uplifted sword. I raised my pistol and fired. So close were we that the pistol itself actually struck him. Man and sword disappeared below and behind me. On my left, ten yards away, was an Arab horseman in a bright-colored tunic and steel helmet, with chain-mail hangings. I fired at him. He turned aside. I pulled my horse into a walk and looked around again.

Where was my troop? Where were the other troops of the squadron? Within a hundred yards of me I could not see a sin-

gle officer or man. About fifty yards away a mass of dervishes had rallied together, and I saw two or three riflemen crouching and aiming their rifles at me. Then for the first time that morning I experienced a sensation of fear. I felt myself absolutely alone. I thought these riflemen would hit me and the rest devour me like wolves. What a fool I was to loiter! I crouched over the saddle, spurred by horse into a gallop. Two or three hundred yards away I found my troop already faced about and partly formed up. The other three troops of the squadron were reforming close by.

I still thought that we had inflicted great slaughter on the enemy and had scarcely suffered at all ourselves. We all expected to be ordered immediately to charge back again. I asked my second sergeant if he had enjoyed himself. His answer was, "Well, I don't exactly say I enjoyed it, sir; but I think I'll get more used to it next time." At this the whole troop laughed.

But now from the direction of the enemy there came a succession of grisly apparitions; horses spouting blood, struggling on three legs, men staggering on foot, men bleeding from terrible wounds, fishhook spears stuck right through them, arms and faces cut to pieces, men gasping, crying, collapsing, expiring.

Our first task was to succor these; and meanwhile our leaders remembered for the fist time that we had carbines. Trumpets were sounded and orders shouted, and we all moved off at a trot towards the flank of the enemy. Arrived at a position from which we could rake the watercourse, two squadrons dismounted and in a few minutes with their fire at three hundred yards compelled the dervishes to retreat. We therefore remained in possession of the field.

The dervishes had carried off their wounded, and the corpses of thirty or forty enemy were all that could be counted on the ground. Among these lay the bodies of more than twenty Lancers, so hacked and mutilated as to be mostly unrecognizable. In all, out of three hundred and ten officers and men, the regiment had lost in the space of about two or three minutes five officers and sixty-five men killed and wounded and a hundred and twenty horses—nearly a quarter of its strength.

* * *

The defeat and destruction of the dervish army was so complete that the frugal Kitchener was able to dispense immediately with the costly services of a British cavalry regiment. Three days after the battle the 21st Lancers started home. In Cairo I found Dick Molyneux, another subaltern of the 21st, who had been seriously wounded by a sword cut above his right wrist. He was now proceeding to England, and I decided to keep him company. One day while we were talking, the doctor came in to dress his wound, a horrible gash which needed some skin grafted over it as soon as possible. The doctor, a great rawboned Irishman, turned upon me. "Oi'll have to take it off you," he said. There was no escape, and as I rolled up my sleeve he added genially, "Ye've heeard of a man being flayed aloive? Well, this is what it feels loike." He then proceeded to cut a piece of skin and some flesh about the size of a shilling from the inside of my forearm. My sensations as he sawed the razor slowly to and fro fully justified his description of the ordeal. However, I managed to hold out, and that skin became part of my friend's arm. I for my part keep the scar as a souvenir.

On my return to London I was forced to reflect seriously upon the financial aspects of my military life. I had watched the remorseless piling up year by year of deficits. To go on soldiering even for a few more years would plainly land me in increasing difficulties. On the other hand the book I had already written and my war correspondence with the *Daily Telegraph* had already brought in about five times as much as the Queen had paid me for three years of assiduous and sometimes dangerous work. I therefore planned the sequence of the year 1899 as follows: to return to India and win the polo tournament; to send in my papers and leave the army; to write a new book; and to look out for a chance of entering Parliament.

It was at this time that I met the group of new Conservative MPs with whom I was afterwards to be much associated: men like Mr. Ian Malcolm, Lord Hugh Cecil, Lord Percy and Lord

Balcarres. These were the rising politicians of the party. They were interested to see me, having heard of my activities, and also on account of my father's posthumous prestige. After several of these encounters I paid a visit to the central offices of the Conservative Party to ask about finding a constituency.

My inquiry, although not meeting with unbounded enthusiasm, did lead to my first serious attempt at public speaking. It was settled that in ten days' time I should address a gathering of the Primrose League in Bath. I spent many hours preparing my discourse and learning it so thoroughly by heart that I could almost have said it in my sleep. When the time came I let off my speech, feeling, as I followed the well-worn grooves from point to point, that it was going quite well. At the end the audience clapped loudly and for quite a long time. Next day the *Morning Post* printed a whole column, and even wrote an appreciative leaderette. I began to feel much pleased with myself and with the world: and in this mood I sailed for India at the end of November 1898.

The following spring all the officers of the regiment subscribed to send our polo team to the inter-regimental tournament at Meerut. Thirty ponies under the charge of a sergeant major were embarked in a special train for the fourteen-hundred-mile journey. Besides their syces they were accompanied by a number of our most trustworthy noncommissioned officers. The train covered about two hundred miles a day, and every evening the ponies were taken out, rested and exercised. Thus they arrived at their destination as fit as when they started. We traveled separately but arrived at the same time.

We had arranged to play for a fortnight at Jodhpur before Going to Meerut. Here we were the guests of the famous Sir Pertab Singh, the regent of Jodhpur. He entertained us royally in his large, cool, stone house. Every evening he and his young kinsmen played us in carefully conducted instruction games. Old Pertab, who loved polo next to war more than anything in the world, used to stop the game repeatedly and point out faults or possible improvements in our play and combination. "Faster, faster, same like fly," he would shout to increase the speed of the game.

The Jodhpur polo ground rises in great clouds of red dust when a game is in progress. These clouds carried to leeward on the strong breeze introduced a disturbing and somewhat dangerous complication. Turbaned figures emerged at full gallop from the dust cloud, or the ball whistled out of it unexpectedly. It was difficult to follow the whole game.

The night before we were to leave Jodhpur for Meerut a grievous misfortune overtook me. Coming down to dinner, I slipped on the stone stairs and out went my shoulder. I got it put in again fairly easily, but the whole of the muscles were strained. By the next morning I had practically lost the use of my right arm. I knew from bitter experience that it would take three weeks or even more before I could hit a polo ball hard again, and even then it would only be under the precaution of having my elbow strapped to within a few inches of my side.

The tournament was to begin in four days. The reader may well imagine my disappointment. My arm had been getting steadily stronger, and I had been playing Number One to the satisfaction of our team. Now I was a cripple. We luckily had a fifth man with us, so I told my friends, when they picked me up, that they must take me out of the team. They considered this very gravely all the next day, and then our captain informed me that they had decided to play me in spite of everything. Even if I could not hit the ball at all and could only hold a stick in my hand, they thought that with my knowledge of the game and of our team play I should give the best chance of success. After making sure that this decision had not been taken out of compassion, I consented to do my best.

Polo is the prince of all games. It combines all the pleasure of hitting the ball, which is the foundation of so many amusements, with all the pleasures of riding and horsemanship, and to both of these there is added that intricate, loyal teamwork which is the essence of football or baseball, and which renders a true combination so vastly superior to the individuals of which it is composed.

The great day arrived. As we had foreseen we met the 4th Dragoon Guards in the final. The match from the very first moment was severe and even. Up and down the hard, smooth Indian polo ground where the ball was very rarely missed and everyone knew where it should be hit, we raced and tore. Quite soon we had scored one goal and our opponents two, and there the struggle hung for some time. Suddenly in the midst of a confused scrimmage close by the enemy goal, I saw the ball spin towards me. I was able to lift the stick over and bending forward gave the ball a feeble forward tap. Through the goalposts it rolled. Two all!

For three years this contest had been the main preoccupation of our lives, and we had concentrated upon it every resource we possessed. Presently I had another chance. Again the ball came to me close to the hostile goal. This time it was traveling fast, and I had no more to do in one fleeting second than to stretch out my stick and send it rolling between the posts. Three to two! Then our opponents exerting themselves swept us down the ground and scored again. Three all!

I must explain that in Indian polo in those days, in order to avoid tie matches, subsidiary goals could be scored. Half the width of the goalposts was laid off on either side by two small flags, and even if the goal were missed, a ball within these flags counted as a subsidiary. No number of subsidiaries equaled one goal, but when our goals were equal, subsidiaries decided. Unfortunately our opponents had the best of us in subsidiaries. Unless we could score again we should lose. Once again fortune came to me, and I gave a little feeble hit at the ball among the ponies' hoofs, and for the third time saw it pass through the goal. This brought the seventh chukker to an end.

We lined up for the last period with four goals and three subsidiaries to our credit, our opponents having three goals and four subsidiaries. Thus if they got one more goal they would not merely tie, *but win the match outright.* Rarely have I seen such strained faces on both sides. You would not have thought it was a game at all, but a matter of life and death. Far graver

crises cause less keen emotion. I do not remember anything of the last chukker as we galloped up and down the ground in desperate attack and counterattack. One of the most welcome sounds I have ever heard was the bell which ended the match, and enabled us to say as we sat exhausted on our points, "We have won the inter-regimental tournament of 1899."

Prolonged rejoicings, intense inward satisfaction, and nocturnal festivities celebrated our victory. Do not grudge these young soldiers their joy and sport. Few of that merry throng were destined to see old age. Our own team was never to play again. It was then or never for us.

I had meanwhile been working continuously upon *The River War,* a history of the Sudan and chronicle of the Omdurman campaign. With summer, and the conclusion of my Indian service, I returned to London, planning to finish my two-volume opus and at the same time make myself available for whatever the British political scene might have in store.

I did not have long to wait. Indeed a few weeks after my arrival in England I received an invitation to contest in a by-election one of the two Conservative [Unionist] seats that had recently become vacant in Oldham. The attitude of the party chiefs was not encouraging. In their opinion the government was not in a good position to win Lancashire by-elections. Nevertheless in those days any political fight in any circumstances seemed to me better than no fight at all. I therefore unfurled my standard and advanced into the battle.

The Unionist administration was beginning to be unpopular. The Liberals had been out of office long enough for the electors to want a change. Democracy does not favor continuity. The Englishman will not, except on great occasions, be denied the indulgence of kicking out the ministers of the Crown whoever they are and of reversing their policy whatever it is. I sailed out therefore upon an adverse tide.

Our two opponents, the Liberal champions, proved themselves men of quality and mark. Both wealthy and successful businessmen, they accused my fellow candidate and me—who

would have had great difficulty in finding five hundred pounds between us—of representing the vested interests of society, while they—who were certainly good for a quarter of a million—claimed to champion in generous fashion the causes of the poor and needy. A strange inversion!

The fight was long and hard. I delivered harangues from morning till night. We had real enthusiasm on our side, and it rejoiced my heart to see these masses of working people who ardently, and for no material advantage, asserted their pride in our Empire and their love for the ancient traditions of the realm. However, when the votes were counted we were well beaten. In a poll of about twenty-three thousand—then as big as was known in England—I was thirteen hundred behind and my colleague about thirty lower.

Then came the recriminations. Everyone threw the blame on me. I have noticed that they nearly always do. Perhaps they think I shall be able to bear it best. Party newspapers wrote leading articles to say what a mistake it was to entrust the fighting of great working-class constituencies to young and inexperienced candidates. I returned to London with those feelings of deflation which a bottle of champagne represents when it has been half emptied and left uncorked for a night.

No one came to see me on my return to my mother's house. However Mr. Balfour, then leader of the House of Commons, always loyal and comprehending, wrote me a letter full of consolation, which ends thus: "Never mind, it will all come right; and this small reverse will have no permanent ill effect upon your political fortunes."

For the rest, I was plunged in *The River War.* We planned to publish about the middle of October, and I was already counting the days till the two massive volumes, upon which I had lavished a whole year of my life, should be launched upon an expectant public.

But when October came, we all had other things to think about.

FOUR

During the nineties, the tide of events in South Africa had been moving steadily forward towards a crisis. The Boers and the British had long had differences concerning this area. The British, possessing the Cape Colony and Natal, controlled the southern and western coasts. The Boers had established their republics in the Orange Free State and Transvaal areas. The development of deep-level gold mining near Johannesburg had in a few years made that Transvaal city a factor in worldwide economic affairs.

The Transvaal republic of Boer farmers, hitherto content to lead a pastoral life in the lonely regions into which their grandfathers had emigrated, now found themselves possessed of vast revenues from gold mines and responsible for a thriving modern city with a very large and rapidly growing population. A strong, capable and ambitious organism of government grew up at the Boer capital, Pretoria, forty miles north of Johannesburg. It became the magnet of Dutch aspirations throughout South Africa. It nourished itself by taxing the golden spoil which was drawn to the surface in ever-growing volume. It reached out to Holland and Germany for European support. Behind all lay the unmeasured fighting strength of fifty or sixty thousand fierce, prejudiced, devout Boer farmers, constituting the finest mass of rifle-armed horsemen ever seen, and the most capable mounted warriors since the Mongols.

The new inhabitants of Johannesburg—the Outlanders, as they were called—in whom British elements predominated, were dissatisfied with the bad and often corrupt administration of the Boer Government; and still more so with its heavy and increasing taxes. They proclaimed the old watchword, "No taxation without representation." They demanded votes. But since their numbers would have swamped the Boer regime, and placed the Transvaal sovereignty in British hands, their rightful demand could by no means be conceded.

The British Government, however, championed the cause of the Outlanders. The case was overwhelming. But you can never persuade anyone by reasonable argument to give up his skin. The old inhabitants intended, by taxing the newcomers, to procure the necessary means for keeping them in subjection. If the quarrel should come to actual fighting, President Kruger and his colleagues saw no reason why Europe should not intervene on their behalf or why they should not become masters of the whole of South Africa.

The Boers too had a good case. Had they not trekked into the wilderness to avoid British rule, with its perpetual interference between them and their native subjects? If England could use the language of the Boston Tea Party, the Boers felt like the Southern planters on the eve of the American Civil War. They declared that the long arm of British imperialism, clutching for gold, had pursued them even into their last refuges; and the British rejoined, in effect, that they were refusing to give civil rights to the modern productive elements who were making nine-tenths of the wealth of their country. Evil collision!

By summer and autumn of 1899 the atmosphere had become tense, charged with electricity, laden with the presage of storm. A well-armed Transvaal police held the Outlanders in strict subjection, and German engineers were tracing the outlines of a fort to dominate Johannesburg. Cannon, ammunition, rifles streamed in from Holland and Germany in quantities sufficient not only to equip the populations of the two Boer republics, but to arm a still larger number of the Dutch throughout the British-governed Cape Colony. Threatened by rebellion as well as war, the British

Government slowly increased its garrisons in Natal and at the Cape. Meanwhile notes and dispatches of ever-deepening gravity, between Downing Street and Pretoria, succeeded one another in a somber chain.

Suddenly in the early days of October the bold, daring men who directed the policy of the Transvaal resolved to bring the issue to a head. An ultimatum requiring the withdrawal of the British forces from the neighborhood of the republican frontiers was telegraphed from Pretoria. The notice gave the British three days in which to comply. From that moment war was certain.

The Boer ultimatum was not an hour old before I was offered an appointment as principal war correspondent of the *Morning Post*. Two hundred fifty pounds a month, all expenses paid, entire discretion as to movements and opinions, four months' minimum guarantee of employment—such were the terms; higher, I think, than any previously paid in British journalism to war correspondents, and certainly attractive to a young man of twenty-four with no responsibilities. I took passage forthwith on the earliest steamer, the *Dunottar Castle*.

In quick succession there arrived the news that the Boers had taken the initiative and were advancing towards the Cape Colony and Natal, that General Sir Redvers Buller had become the British commander in chief, that the reserves were called out, and that our only army corps was to be sent at once to the Cape.

The British war office of those days was the product of two generations of consistent parsimony. So utterly unrelated to the actual facts were its ideas at this time that to an Australian request to be allowed to send contingent of troops, the only reply was, "Unmounted men preferred." Nevertheless their intelligence branch had prepared two volumes on the Boer republics, and the head of this branch told the War Secretary that two hundred thousand men would be required. His views were shouted, and the two volumes sent to Buller were returned within an hour with the message that he "knew everything about South Africa." The Undersecretary of State, who dined

with me one of these nights, alone seemed to appreciate the difficulties of the task. The Boers, he said, were thoroughly prepared and acting on definite plans. He thought that the opening of the campaign might be unpleasant, that the British forces might be surrounded here and there by a far more mobile foe, and having been brought to a standstill might be pounded to pieces by a new form of heavy Maxim gun with which the Boers were equipped. (This gun we afterwards learned to know quite well as the pom-pom.) I must confess that in the ardor of youth I was much relieved to learn that the war would not be entirely one-sided. I thought it very sporting of the Boers to take on the whole British Empire, and I felt quite glad they were not defenseless.

Let us learn our lessons. Never, never, never believe any war will be smooth and easy, or that anyone who embarks on the strange voyage can measure the tides and hurricanes he will encounter. Once the signal is given, the statesman is no longer the master of policy but the slave of unforeseeable and uncontrollable events. Antiquated war offices, weak, incompetent or arrogant commanders, untrustworthy allies, hostile neutrals, malignant fortune, ugly surprises, awful miscalculations—all take their seats at the council board on the morrow of a declaration of war. Always remember, however sure you are that you can easily win, that there would not be a war if the other man did not think he also had a chance.

One of my father's oldest friends had some years before extracted a promise from Sir Redvers Buller that, if ever that general received the command of an army in the field, he would take him on his staff. His approaching departure for the front now was made the occasion of a dinner in his honor at the Carlton Hotel, which I was privileged to attend. The Prince of Wales and about forty men of the ruling generation formed a powerful and a merry company.

My father's friend, now an elderly man of great wealth, was to have the function of looking after the personal comfort of the commander in chief. For this purpose he was presented at the

dinner with I do not know how many cases of the very best champagne and the very oldest brandy which the cellars of London boasted. He was informed by the donors that he was to share these blessings freely with me whenever opportunity arose. These cases of champagne and brandy and my share in them fell among the many disappointments of war. In order to make sure that they reached the headquarters intact, the cases were labeled "Castor Oil." Two months later in Natal, when they had not yet arrived, an urgent telegram was dispatched to Durban asking for the castor oil. The replay came back that the packages of this drug addressed to this staff officer had by an error already been issued to the hospitals. There were now, however, ample stores of castor oil available at the base and the commandant was forwarding a full supply forthwith!

Many of our South African experiences were to be similar.

The *Dunottar Castle* sailed from Southampton on October 11, the day the Boer ultimatum expired. Sir Redvers Buller and the entire headquarters staff of our one (and only) organized army corps were aboard. Buller was a characteristic British personality. He looked stolid. He said little, and what he said was obscure. He was not the kind of man who could explain things, and he never tried to do so. He usually grunted, or nodded, or shook his head, in serious discussions; and shoptalk of all kinds was sedulously excluded from his ordinary conversation. He had shown himself a brave and skillful officer in his youth, and for nearly twenty years he had filled important administrative posts of a sedentary character in Whitehall. His name had long been before the public; their belief in him was unbounded. Certainly he was a man of a considerable scale. He plodded on from blunder to blunder and from one disaster to another, without losing either the regard of his country or the trust of his troops. Independent, portentous, he gave the same sort of impression to the British as the French afterwards received from General Joffre.

While the issues of peace and war seemed to hang in their last flickering balance, and before a single irrevocable shot had

been fired, we steamed off into gray storms. There was of course no wireless in those days, and therefore at this most exciting moment the commander in chief, the headquarters staff and the correspondent of the *Morning Post* dropped completely out of the world. Still we expected news at Madeira, which was reached on the fourth day. There was no news at Madeira, except that negotiations were at an end and that troops on both sides were moving. In this suspense we glided off again, to pass a fortnight completely cut off from all view of the drama which filled our thoughts. The liner cut her way through calm seas with placid unconcern. She did not even increase her speed above the ordinary. Such a measure would have been unprecedented. The usual sports and games of a sea voyage occupied her passengers. The general opinion among the military staff was that it would be all over before they got there.

Suddenly one day there was a stir on deck. A tramp steamer was sighted ahead approaching us from the very shores that were our destination. I think she would have passed us about a mile away but for the fact that some of the younger ones among us started a buzz of excitement. "Surely we can get some news from her? Can't we stop her?"

These murmurs reached the ears of high seniority. Grave counsel was taken. It was decided that it would be unusual to stop a ship at sea. Possible there might be a claim for damages against the government, or some other penalty like that which happens if you pull the communication cord without sufficient provocation. As a bold half measure signals were made to the steamer, asking for news. She altered her course and steamed past us at little more than a hundred yards' distance. A blackboard was held up from her deck, and on this we read:

BOERS DEFEATED.
THREE BATTLES.
PENN SYMONDS KILLED.

She faded away behind us, and we were left to meditate upon this cryptic message.

The staff were stunned. There had evidently been fighting—actual battles! And a British general had been killed! Was it likely, if they had been defeated in three battles, that Boers would continue their hopeless struggle? Was it possible they would have any strength left? It was not until some minutes had passed that a staff officer ventured to address Buller.

"It looks as if it will be over, sir."

Thus pressed, the great man answered, "I dare say there will be enough left to give us a fight outside Pretoria." His military instinct was sure and true. There was quite enough left!

It was dark when we anchored in Table Bay; but the innumerable lights of Cape Town twinkled from the shore, and a stir of launches soon beset our vessel. High functionaries and naval and military officers arrived, bearing their reports. The headquarters staff sat up all night to read them. I got hold of a bundle of newspapers and learned that the Boers had invaded Natal, had attacked our advanced forces at Dundee, had killed General Penn Symonds and very nearly rounded up his three or four thousand troops as they made their hurried and hazardous retreat to Ladysmith, about 120 miles inland from the coast of Natal. Here Sir George White at the head of about twelve thousand men, with forty or fifty guns and a brigade of cavalry, attempted to bar their further advance.

On the very day of our arrival, October 31, a disaster had occurred around Ladysmith. Nearly twelve hundred British infantry had been forced to surrender, and the rest of the widely dispersed forces were thrown back upon Ladysmith, hastily converted into an entrenched camp. Being speedily invested on all sides by the Boers, and their railway cut, the British settled down in a prolonged siege to await relief. Meanwhile, in the west other Boer forces had similarly encircled Mafeking and Kimberley, and sat down stolidly to the process of starving them out. Finally, the Dutch areas of the Cape Colony itself were quivering upon the verge of rebellion. Throughout the vast subcontinent every man's hand was against his brother, and

the British Government could be sure of nothing beyond the gunshot of the navy.

It was clear as soon as we had landed that the first heavy fighting would come in Natal. Buller's army corps would take a month or six weeks to assemble. There would be time to watch the Natal operations and come back to Cape Colony for the main advance. Accordingly, I made the seven-hundred-mile railway journey from Cape Town to Port Elizabeth and continued by steamer, in the teeth of a horrible antarctic gale, to the Natal port of Durban.

It had been my intention to get into Ladysmith; but I was too late, the door was shut. I could get no farther than Estcourt, a tiny township of a few hundred inhabitants, beyond which the trains no longer ran. The Boers had occupied the stations and held the iron railway bridge beyond. There was nothing to do but to wait at Estcourt with such handfuls of troops as were being hurriedly collected to protect the southern part of Natal from the impending Boer invasion. A single battalion of Dublin Fusiliers, two or three guns and a few squadrons of Natal Carabineers, two companies of Durban Light Infantry and an armored train were the only forces which remained for the defense of the colony. All the rest of the Natal army was blockaded in Ladysmith.

During the week I was at Estcourt our weakness was such that we expected to be surrounded almost every day, and could do little but fortify our post and wear a confident air. The days passed slowly and anxiously. At any moment ten or twelve thousand mounted Boers might sweep forward to attack us or cut off our retreat. Cavalry reconnaissances were pushed out every morning to give us timely notice should the enemy advance; and in an unlucky moment it occurred to the general in command to send his armored train along the sixteen miles of intact railway line to supplement the efforts of the cavalry.

Nothing looks more formidable and impressive than an armored train; but nothing is in fact more vulnerable. It was only necessary to blow up a bridge or culvert to leave the monster stranded far from home and help, at the mercy of the enemy.

This situation did not seem to have occurred to our commander. He decided to put two companies of infantry into an armored train of six open freight cars, and add a small six-pounder naval gun with some sailors landed from HMS *Terrible,* together with a breakdown gang, and to send this considerable portion of his force out to reconnoiter. Captain Haldane was selected to command this operation. Although he did not conceal his misgivings on the prudence of the enterprise, he was, like everyone else at the beginning of the war, very keen upon adventure and a brush with the enemy. Would I come with him? I was eager for trouble; I accepted the invitation without demur.

The armored train proceeded about fourteen miles towards the enemy without a sign of opposition or indeed of life or movement on the landscape. We stopped for a few moments at a station to telegraph our arrival to the general. No sooner had we done this than we saw, on a hill between us and home, a number of small figures moving about and hurrying forward. Certainly they were Boers. There was not an instant to lose. We started immediately on our return journey.

As we approached the hill, I saw a cluster of Boers on the crest. Suddenly three wheeled things appeared among them, and instantly bright flashes of light opened and shut ten or twelve times. A huge white ball of smoke sprang into being and tore out into a cone, only a few feet away, it seemed, above my head. It was shrapnel—the first I had ever seen in war, and very nearly the last! The steel sides of the car tanged with a patter of bullets. There was a crash from the front of the train, and a series of sharp explosions.

The railway line curved round the base of the hill on a steep down gradient, and our pace increased enormously. The Boer artillery (two guns and a pom-pom) had only time for one discharge before we were round the corner out of their sight. It had crossed my mind that there must be a trap farther on. I was about to mention this to Haldane when suddenly there was a tremendous shock; he and I and all the soldiers in the car were pitched head over heels onto its floor. The armored train, trav-

eling at not less than forty miles an hour, had been thrown off the rails.

In our car no one was seriously hurt. From the enemy's hill, about twelve hundred yards behind us, came almost immediately an accurate and heavy rifle fire. The bullets whistled overhead and rang and splattered on the steel plates like hail. Haldane and I debated what to do. It was agreed that he with the little naval gun and his company of Dublin Fusiliers in the rear car should endeavor to keep down the enemy's firing, and that I should go forward to find out the extent of the damage.

I nipped out of the car and ran to the head of the train, which had been made up with the engine in the middle, three cars being pushed before it and three drawn behind. The engine and three rear cars were undamaged, but the three forward cars were off the rails. One car had turned completely head over heels, killing and terribly injuring some of the men; two other cars were derailed.

Behind the overturned cars infantrymen, bruised, shaken and some severely injured, had found a temporary shelter. The enemy's fire was continuous, and soon there mingled with the rifles the bang of the field guns and the near explosion of their shells. We were in the toils of the enemy.

The overturned car lay clear of the track, but the other two, one still upright, and one on its side, lay jammed against each other in disorder, across the rails, blocking the homeward path for the rest of the train. The rails, however, appeared to be intact.

I conceived the idea of using the engine as a ram, to pull and push the two wrecked cars clear of the line. Captain Haldane agreed to my proposal and undertook to keep the enemy hotly engaged meanwhile.

I was very lucky in the hour that followed not to be hit. It was necessary for me to be almost continuously moving up and down the train or standing in the open, directing the engine driver. First the engine had to tug the car, which was standing half off the rails, backwards until it was clear of the other wreckage, and then to throw it completely off the rails.

The weight of the iron car half on the ties was enormous, and the engine wheels skidded vainly several times. At last the car was drawn sufficiently far back, and I called for volunteers to overturn it from the side, while the engine pushed it from the end. The car heeled over further under their pressure. Safety and success appeared in sight. The engine gave a shove at the right moment; the car fell off the line, and the track seemed clear.

Then followed one of the bitterest disappointments of my life.

The footplate, a platform extending about six inches out from the floor of the engine cab, had jammed against the corner of the newly overturned car. It did not seem safe to push very hard, lest the engine itself should be derailed. Time after time we moved back a yard or two and butted forward at the obstruction. Each time it moved a little, but soon it was evident that the newly derailed car had become jammed in a T-shaped position with the one off the line ahead of it, and the more the engine pushed, the greater became the block.

It occurred to me now that the jammed cars might be loosened by pulling backwards. However the coupling chains of the engine would not reach by five or six inches those of the overturned car. By a solitary gleam of good luck, a spare coupling was found. The engine hauled at the wreckage and before the chain parted pulled it about a yard backwards and off the track. Now surely the line was clear at last. But again the corner of the engine footplate jammed with the corner of the car, and again we came to a jarring halt.

The excitement of the work absorbed me completely. I remember thinking that it was like working in front of an iron target at a rifle range. We struggled for seventy minutes among these clanging, rending iron boxes, amid the repeated explosions of shells and the ceaseless hammering of bullets, and with only five or six inches of twisted ironwork to make the difference between danger, captivity and shame on the one hand, and safety, freedom and triumph on the other. At last, as the artillery firing steadily increased and the second gun came into action from the opposite flank, I decided to run a great risk which

could mean derailing the engine and sealing our doom. The engine was backed to its fullest extent and driven full tilt at the obstruction. There was a harsh crunching tear, the engine reeled on the rails, and as the obstructing car reared upwards, ground its way past and gained the homeward side, free and safe. But our three remaining cars were still the wrong side of the obstruction, which had fallen back into place after the engine had passed. What were we to do?

Finally it was agreed that the engine should go slowly homeward with all the wounded and that the fusiliers should retreat on foot, sheltering themselves behind the slow-moving engine. Upwards of forty persons, of whom the greater part were streaming with blood, were crowded on the engine and its tender, and we began to move. I was in the cab, directing the engine driver. The shells burst all around, some striking the engine. The pace increased, the infantry outside began to lag and soon were three hundred yards behind. At last I forced the engine driver to stop. Close at hand was the bridge across the Blue Krantz River, a considerable span. I told the engine driver to cross the bridge and wait on the other side, while I went back to bring along Captain Haldane and his fusiliers.

But while these events had been taking place everything else had been in movement. I had not retraced my steps two hundred yards when, instead of Haldane and his company, two figures in plain clothes appeared upon the line. "Boers!" My mind retains its impression of these tall figures, clad in dark, flapping clothes, with slouch, storm-driven hats, poising on their leveled rifles hardly a hundred yards away. I turned and ran back toward the engine, the two Boers firing as I ran. Their bullets, sucking to right and left, seemed to miss only by inches. We were in a small cut with banks about six feet high on either side. I flung myself against one bank. It gave no cover. Another glance at the two figures; one was now kneeling to aim. Movement seemed the only chance. Again I darted forward: again two soft kisses sucked in the air; but nothing struck me. This could not endure. I must get out of the cut—that damnable corridor! I jigged to the left, and scrambled up the

bank. The earth sprang up beside me. I got through the wire fence unhurt. Outside the cut was a tiny depression. I crouched in this, struggling to get my breath again.

About two hundred yards away was the rocky gorge of the Blue Krantz River, offering plenty of cover. I determined to make a dash for it. I rose to my feet. Suddenly on the other side of the railway, separated from me by the rails and two wire fences, I saw a horseman galloping furiously, a tall, dark figure, holding his rifle in his right hand. He pulled up his horse almost in its own length and shaking the rifle at me shouted a loud command. We were forty yards apart. That morning I had taken with me, correspondent status notwithstanding, my Mauser pistol. I thought I could kill this man. I put my hand to my belt, the pistol was not there. When I engaged in clearing the line, I had taken it off. I was quite unarmed. Meanwhile, the Boer had covered me with his rifle. His horse stood stock-still, so did he, and so did I. I looked towards the river. The Boer continued to look along his sights. I thought there was absolutely no chance of escape. If he fired he would surely hit me, so I held up my hands and surrendered myself a prisoner of war.

My captor lowered his rifle and beckoned me to come across to him. I obeyed. At his side I tramped back towards the spot where I had left Captain Haldane and his company. They were already prisoners. We found ourselves in the midst of many hundreds of mounted Boers.

Such is the episode of the armored train and the story of my capture on November 15, 1899.

It was not until three years later, when the Boer generals visited England to ask for some loan or assistance on behalf of their devastated country, that I was introduced at a private luncheon to their leader, General Botha. We talked of the war and I briefly told the story of my capture. Botha listened in silence; then he said, "Don't you recognize me? It was I who took you prisoner. I, myself," and his bright eyes twinkled. At the time of

our adventure he had entered upon the invasion of Natal as a private burgher; his own disapproval of the war had excluded him from any high command at its outset. This was his first action. But as a simple private serving in the ranks he had galloped on ahead and in front of the whole Boer forces in the ardor of pursuit. Thus we met.

Few men that I have known have interested me more than Louis Botha. An acquaintance formed in strange circumstances ripened into a friendship which I greatly valued. I saw in this grand, rugged figure the Father of his country, the wise and profound statesman, the farmer-warrior, the crafty hunter of the wilderness, the deep, sure man of solitude.

But let me return to my story.

It had begun to rain. As I sat drenched and miserable on the ground with the prisoners and some mortally wounded men, I cursed, not only my luck, but my own decision. I could quite decently have gone off upon the engine. I had not helped anybody by attempting to return to the company. I had needlessly involved myself in a useless and hopeless disaster. Yet this misfortune was to lay the foundations of my later life. I was not to be done out of the campaign. I was not to languish as a prisoner. I was to escape, and by escaping was to gain a public reputation or notoriety which made me well-known henceforward among my countrymen, and acceptable as a political candidate in a great many constituencies.

But these events and possibilities were hidden from me, and it was in dudgeon that I ranged myself in the line of prisoners before the swiftly erected tent of the Boer headquarters. My gloomy reflections took a sharper and darker turn when I found myself picked out from the other captive officers and ordered to stand apart. I had enough military law to know that a civilian in a half uniform who has taken an active and prominent part in a fight, even if he has not fired a shot himself, is liable to be shot at once by drumhead court-martial. None of the armies in the Great War would have wasted ten minutes upon the business. I therefore occupied myself in thinking out what answers

I should make to the various short, sharp questions which might soon be addressed to me, and what sort of appearance I could keep up if I were soon and suddenly told that my hour had come.

After about a quarter of an hour I was much relieved when I was curtly told to rejoin the others. Indeed I felt quite joyful when a few minutes later a Boer field cornet came out of the tent and said, "We are not going to let you go, old chappie, although you are a correspondent. We can't catch the son of a lord every day." I need really never have been alarmed. To the Boer mind the destruction of a white man's life, even in war, was a lamentable and shocking event. They were the most goodhearted enemy I have every fought against in the four continents in which it has been my fortune to see active service.

So it was settled that we were all to be sent to Pretoria as prisoners of war.

Prisoner of war! That is a melancholy state. You are in the power of your enemy. You owe your life to his humanity, and your daily bread to his compassion. You must obey his orders, await his pleasure, possess your soul in patience. Meanwhile the war is going on, opportunities for action and adventure are slipping away. The days are very long. Hours crawl like paralytic centipedes.

Moreover, the whole atmosphere of prison, even the most easy and best regulated prison, is odious. Companions quarrel about trifles and get the least possible pleasure from each other's society. You feel a sense of constant humiliation in being confined to a narrow space, fenced in by railings and wire, watched by armed men, and webbed about with a tangle of regulations and restrictions. I certainly hated every minute of my captivity more than I have ever hated any other period in my whole life. Luckily it was very short.

During the first three weeks of my captivity, I was engaged in arguing with the Boer authorities that they should release me as a press correspondent. They replied that I had forfeited my noncombatant status by the part I had taken in the armored-train fight. The Natal newspapers, captured by the Boers, had

contained glowing accounts of my activities, and attributed the escape of the engine and the wounded entirely to me. The Boers therefore contended that I must be treated as a prisoner of war, confined to the State Model Schools in Pretoria. As soon as I learned of this decision, I resolved to escape. I shall transcribe what I wrote immediately after the event.

"The State Model Schools stood in the midst of a quadrangle, and were surrounded on two sides by an iron grille and on two by a corrugated-iron fence about ten feet high. These boundaries offered little obstacle in themselves, but the fact that they were guarded on the inside at fifty-yard intervals by sentries, armed with rifle and revolver, made them well-nigh insuperable.

"After continual watching, it was discovered that at certain moments on their beats the sentries were unable to see the top of a few yards of the wall near a small lavatory on the eastern side. Electric lights in the middle of the quadrangle brilliantly lighted the whole place, but this wall was in shadow. To pass the two sentries it was necessary to hit off the exact moment when both their backs should be turned together. After the wall was scaled we should be in the garden of the villa next door. There the plan came to an end. How to pass unnoticed through the town, how to cover the two hundred and eighty miles to the Portuguese East Africa frontier, were questions which would arise later.

"I was determined that nothing should stop my taking the plunge. One evening, after careful preparation with my fellow conspirators, Captain Haldane and another officer, I strolled across the quadrangle and secreted myself in the lavatory. Through an aperture I watched the sentries. For some time they remained stolid and obstructive. Then all of a sudden one turned and walked up to his comrade, and they began to talk. Their backs were turned.

"Now or never! I stood on a ledge, seized the top of the wall with my hands and drew myself up. Twice I let myself down again in sickly hesitation. If the sentries happened to look, whether they would challenge or fire depended entirely upon their dispositions. With a third resolve I scrambled up and over. My waistcoat got entangled with the ornamental metalwork on

the top. I had to pause for an appreciable moment to extricate myself. In this posture I had one parting glimpse of the sentries still talking; one of them was lighting his cigarette, and I remember as a distinct impression the glow on the inside of his hands. Then I lowered myself lightly down into the adjoining garden and crouched among the shrubs. I was free! The first step had been taken, and it was irrevocable. It now remained to await the arrival of my comrades. The bushes in the garden gave a good deal of cover, and in the moonlight their shadows fell dark on the ground. I lay here for an hour in great impatience and anxiety. Where were the others?

"Suddenly I heard voices from within the quadrangle. Two British officers were walking up and down inside, laughing and talking all manner of nonsense—amid which I caught my name. I risked a cough. One of the officers immediately began to chatter alone. The other said, clearly, 'They cannot get out. The sentry suspects. It's all up. Can you get back again?'

"Now all my fears fell from me. To go back was impossible. I could not hope to climb the wall unnoticed. Fate pointed onwards. Besides, I said to myself, 'Of course, I shall be recaptured, but I will at least have a run for my money.' I said to the officers, 'I shall go on alone.'

"The gate which led into the road was only a few yards from another sentry. I said to myself, '*Toujours de l'audace,*' put my hat on my head, strode into the middle of the garden, walked past the windows of the house without any attempt at concealment, and so went through the gate and turned to the left. I passed the sentry at less than five yards. Most of them knew me by sight. Whether he looked at me or not I do not know, for I never turned my head. I restrained with the utmost difficulty an impulse to run. But after walking a hundred yards and hearing no challenge, I knew that the second obstacle had been surmounted. I was at large in Pretoria.

"I walked on leisurely through the night, humming a tune and choosing the middle of the road. The streets were full of burghers, but they paid no attention to me. Gradually I reached the suburbs, and on a little bridge I sat down to reflect and con-

sider. I was in the heart of the enemy's country. I knew no one to whom I could apply for succor. Nearly three hundred miles stretched between me and Delagoa Bay. My escape must be known at dawn. Pursuit would be immediate. Yet all exits were barred. The town was picketed, the country was patrolled, the trains were searched, the line was guarded. I wore a civilian brown flannel suit. I had seventy-five pounds in my pocket and four slabs of chocolate, but the compass and the map which might have guided me, the meat lozenges which should have sustained me, were in my friends' pockets. Worst of all, I could not speak a word of Dutch or Kaffir, and how was I to get food or direction?

"But when hope had departed, fear had gone as well. I formed a plan. I would find the Delagoa Bay Railway. Without map or compass, I must follow that in spite of the pickets. After walking south for half a mile I struck the railroad. Was it the line to Delagoa Bay? I could not be sure, but I resolved nonetheless to follow it. The night was delicious. A wild feeling of exhilaration took hold of me. At any rate, I was free, if only for an hour.

"The fascination of the adventure grew. Unless the stars in their courses fought for me, I could not escape. Where, then, was the need of caution? I marched briskly along the line. Here and there the lights of a picket fire gleamed. Every bridge had its watchers. But I passed them all, taking scarcely any precautions. Perhaps that was the reason I succeeded.

"As I walked I extended my plan. I could not march three hundred miles to the frontier. I would board a train in motion and hide on the roof, on the couplings—anywhere. After walking for two hours I perceived the signal lights of a station. I circled it and hid in the ditch by the track about two hundred yards beyond the platform. An hour passed. I began to grow impatient. Suddenly I heard the approaching whistle, and great yellow headlights flashed into view. The train waited five minutes at the station, and started again. I crouched by the track. The train gathered speed sooner than I had expected. The flaring lights drew swiftly near. The engine driver silhouetted against his furnace glow, the black profile of the engine, the clouds of

steam rushed past. Then I hurled myself on the cars, clutched, missed, clutched again, grasped some sort of handhold. I was swung off my feet—my toes bumping on the line, and with a struggle seated myself on the couplings of the fifth car from the front of the train. It was a freight train, and the cars were full of soft sacks covered with coal dust. They were, in fact, bags filled with empty coal bags going back to the colliery. I crawled on top and burrowed in among them. They were warm and comfortable. Where was the train going? Would it be searched? What should I do in the morning? Ah, never mind that. Sufficient for the night was the luck thereof. I resolved to sleep.

"I woke before daybreak with all the feelings of exhilaration gone. I must leave the train, drink at a pool and find some hiding place while it was still dark. I could not risk being unloaded with the coal bags. Another night I would board another train. I crawled from my cozy hiding place. The train was running at a fair speed. I took hold of the iron handle at the back of the car and sprang. My feet struck the ground, and the next instant I was sprawling in the ditch considerably shaken but unhurt.

"It was still dark. I was in the middle of a wide valley, surrounded by low hills, and carpeted with high grass drenched in dew. I soon found a clear pool. I was very thirsty, but long after I had quenched my thirst I continued to drink, that I might have sufficient for the whole day. Presently the dawn began to break. I saw with relief that the railway ran steadily towards the sunrise. I had taken the right line, after all.

"Having drunk my fill, I set out to find some hiding place, and as it became broad daylight I entered a small grove of trees which grew on the side of a deep ravine. Here I resolved to wait till dusk. It was not four o'clock. Fourteen hours lay between me and night. My sole companion was a gigantic vulture, who manifested an extravagant interest in my condition, and made hideous and ominous gurglings from time to time.

"The elation and the excitement of the previous night had burned away, and a chilling reaction followed. I found no com-

fort in any of the philosophical ideas which some men parade in their hours of ease and safety. They seemed only fair-weather friends. I realized with awful force that without the assistance of that High Power which interferes in the eternal sequence of causes and effects more often than we are always prone to admit, I could never succeed. I prayed long and earnestly for help and guidance. My prayer, as it seems to me, was swiftly and wonderfully answered."

I wrote these lines many years ago while the impression of the adventure was strong upon me. Then I could tell no more without compromising the liberty and perhaps the lives of those who had helped me. Now I need have no such scruple.

I made my way to the place where I had seen the trains crawling so slowly up the slope, and soon found a point where the curve of the track would prevent the engine driver and the guard from seeing me board one of the cars. Here, behind a little bush, I sat down and waited hopefully. An hour passed; two hours; three hours—and yet no train. My plan began to crumble. Was it possible that no trains ran on this part of the line during the dark hours? Between twelve and one in the morning I lost patience and started along the track, resolved to cover at any rate ten or fifteen miles of my journey. I did not make much progress. Every bridge was guarded by armed men; the veldt was bathed in the bright rays of the full moon. I had to make wide circuits and even to creep along the ground. I fell into bogs and swamps, brushed through high grass dripping with dew, and waded across the streams over which the bridges carried the railway. I was soon drenched to the waist. I had been able to take very little exercise during my month's imprisonment, and I was quickly tired. Presently I approached a station. Laid up on the sidings were three long freight trains, motionless, confirming my fears that traffic was not maintained by night on this part of the line. Where, then, was my plan which had looked so fine and sure?

There was nothing for it but to plod on—but in an increasingly purposeless and hopeless manner. I felt very miserable when I saw here and there the lights of houses and thought of the warmth and comfort within them, but knew that they meant only danger to me. Out in the darkness to my left flamed the fires of a Kaffir kraal. I had heard that the Kaffirs hated the Boers and were friendly to the British. They might be induced to help me. I set out towards the fires.

I must have walked a mile or so in this resolve before a realization of its imprudence overtook me. I retraced my steps perhaps half the distance. Then I stopped and sat down, completely baffled, destitute of any idea what to do or where to turn. Suddenly without the slightest reason all my doubts disappeared. It was certainly by no process of logic that they were dispelled. I just felt quite clear that I would go to the Kaffir kraal. I had sometimes in former years held a planchette pencil and written while others had touched my wrist or hand. I acted in exactly the same subconscious manner now.

I walked on rapidly, and after some time perceived that the fires were not from a Kaffir kraal, but from the furnaces of the power plant of a coal mine. Hard by stood a small but substantial stone house.

I halted to survey this scene and to resolve my action. It was still possible to turn back. On the other hand, here was a chance. I had heard it said before I escaped that in the mining district a certain number of English residents had been suffered to remain in order to keep the mines working. Had I been led to one of these? Did this house which frowned dark and inscrutable contain a Briton or a Boer? A friend or a foe? The odds were heavy against me. With reluctant steps I advanced towards the silent house, and struck with my fist upon the door.

There was a pause. I knocked again, and an upper window opened.

"*Were ist da?*" cried a man's voice.

I felt the shock of disappointment and consternation to my fingers.

"I want help; I have had an accident," I replied.

Some muttering followed. Then I heard steps descending the stairs. The door was opened abruptly. In the darkness of the passage stood a tall man hastily attired, with a pale face and dark mustache.

"What do you want?" he said, this time in English.

I had now to think of something to say. I wanted above all to get into parley with this man, to get matters in such a state that instead of raising an alarm and summoning others he would discuss things quietly.

"I am a burgher," I began. "I have had an accident. I was going to join my commando at Komati Poort. I have fallen off the train. We were skylarking. I have been unconscious for hours. I think I have dislocated my shoulder."

It is astonishing how one thinks of these things. This story leaped out as if I had learned it by heart. Yet I had not the slightest idea what I was going to say next.

The stranger regarded me intently and, after some hesitation, said at length, "Well, come in." He pointed into a dark room. I walked past him and entered, wondering if it was to be my prison. He lit a lamp. I was in a small room, evidently a dining room and office in one. I noticed, besides a large table, a roll desk. On his end of the table my host laid a revolver.

"I think I'd like to know a little more about this accident of yours," he said, after a considerable pause.

"I think," I replied, "I had better tell you the truth."

"I think you had," he said, slowly.

So I took the plunge and threw all I had upon the board: "I am Winston Churchill, war correspondent of the *Morning Post*. I escaped last night from Pretoria. I am making my way to the frontier. I have plenty of money. Will you help me?"

There was another long pause. My companion rose from the table slowly and locked the door. After this act, which struck me as ambiguous, he advanced upon me and suddenly held out his hand. "Thank God you have come here! It is the only house for twenty miles where you would not have been handed over. We are British here, and we will see you through."

It is easier to recall across the gulf of years the spasm of relief which swept over me, than it is to describe it. I felt like a drowning man pulled out of the water and informed he has won the Derby!

My host now introduced himself as John Howard, manager of the Transvaal Collieries. He had become a naturalized burgher of the Transvaal some years before the war. But out of consideration for his British race, he had not been called up to fight against the British. He had been allowed to remain with one or two others on the mine, keeping it pumped out and in good order until coal-cutting could be resumed. He had with him four British subjects, who had been allowed to remain only upon giving their parole to observe strict neutrality. He himself as burgher of the Transvaal Republic would be guilty of treason in harboring me, and liable to be shot.

"Never mind," he said, "we will fix it up somehow. They have the hue and cry out for you all along the line and all over the district."

I said that I did not wish to compromise him. Let him give me food, a pistol, a guide, if possible a pony, and I would make my own way to the sea.

He would not hear of it. He would fix up something. But he enjoined the utmost caution. Spies were everywhere. He had two Dutch servant-maids actually sleeping in the house, and there were many Kaffirs employed about the mine. He became very thoughtful.

Then: "But you are famishing."

I did not contradict him. In a moment he had bustled off into the kitchen, telling me meanwhile to help myself from a whisky bottle and soda-water machine. He returned with the best part of a cold leg of mutton and various other delectable commodities, and, leaving me to do full justice to these, he let himself out of the house by a back door.

Nearly an hour later he returned. "It's all right," he said. "The men are all for it. We must put you down in the pit tonight, and there you will have to stay till we can see how to get you out of the country. One difficulty," he said. "will be the

food. The Dutch girl sees every mouthful I eat. The cool will want you to know what has happened to her leg of mutton. I shall have to think it all out during the night. You must get down in the pit at once. We'll make you comfortable enough."

Accordingly I followed my host across a little yard to the mine shaft. Here a stout man, introduced as Mr. Dewsnap, of Oldham, locked my hand in a grip of crushing vigor. "They'll all vote for you next time," he whispered.

A door was opened and I entered the cage. Down we shot into the bowels of the earth. At the bottom were two Scottish miners with lanterns, a mattress and blankets. We walked through the pitchy labyrinth and finally stopped in a sort of chamber where the air was cool and fresh. Here Mr. Howard handed me candles, a bottle of whisky and a box of cigars.

"Don't you move from here, whatever happens," was his parting injunction. My four friends trooped off with their lanterns, and I was left alone. Viewed from the velvety darkness of the pit, life seemed bathed in rosy light. After the perplexity and even despair through which I had passed I now saw myself rejoining the army with a real exploit to my credit, and in that full enjoyment of freedom and keen pursuit of adventure dear to the heart of youth.

When I awoke from a sound sleep, the afternoon must have been far advanced. I searched for the candle, but could feel it nowhere. I did not know what pitfalls these mining galleries might contain, so I thought it better to lie quiet on my mattress and await developments. Several hours passed before the faint gleam of a lantern showed that someone was coming. It proved to be Mr. Howard himself, armed with a chicken and other good things. He also brought several books. He asked me why I had not lighted my candle. I said I couldn't find it.

"Didn't you put it under the mattress?" he asked.

"No."

"Then the rats must have got it."

Several times later during my stay in the mine I was to be awakened suddenly with a feeling of movement about me.

Luckily for me, I have no horror of rats as such, and being reassured by their evident timidity, I was not particularly uneasy. All the same, these three days were not among the most pleasant which my memory re-illumines. The patter of little feet and a perceptible sense of stir and scurry were continuous. Once I was waked up from a doze by one actually galloping across me. On the candle being lighted these beings became invisible.

On the third day Mr. Howard announced that the hue and cry about my escape seemed to be dying away. The fact that there were a number of English remaining in the mining region had indicated it as a likely place for me to have turned to, but, no trace of the fugitive having been discovered, the talk among the Boer officials was now that I must be hiding at the house of some British sympathizer in Pretoria. In these circumstances Mr. Howard thought that I might shift to quarters above the ground. Accordingly, I had a fine stroll in the glorious fresh air and moonlight, and moved in behind packing cases in the office. Here I remained for three more days.

On December 16, the fifth day of escape, Mr. Howard informed me he had made a plan to get me out of the country. A Dutchman, Burgener by name, was sending a consignment of wool to Delagoa Bay on the nineteenth. This gentleman, who was well disposed to the British, had been made a party to our secret, and was willing to assist. The bales of wool could be so packed in the railroad car as to leave a small place in the center in which I could be concealed. A tarpaulin would be fastened over each car after it had been loaded; it was unlikely that it would be removed at the frontier station of Komati Poort. Did I agree to take this chance?

I was more worried about this than almost anything that had happened to me so far in my adventure. The idea of being perfectly helpless, absolutely at the caprice of a searching party at the frontier, was profoundly harassing. I should have been still more anxious if I could have read the description of myself with the reward for my recapture "dead or alive" which was now widely distributed. In the end I accepted the proposal of my generous rescuer, and arrangements were made.

* * *

At two o'clock on the morning of the nineteenth, I waited, fully dressed. My host appeared. He beckoned. Not a word was spoken. He led the way through the front office to the railroad siding where three large cars stood. Three figures, among them the Scottish miners, were strolling about in the moonlight. A gang of Kaffirs was lifting an enormous bale into the rearmost car. Howard strolled along to the first one and pointed. I nipped up and saw a hole between the wool bales and the end of the car, just wide enough to squeeze into. From this a narrow tunnel led through the bales into the center of the car. Here was a space wide enough to lie in, high enough to sit up in. In this I took up my abode.

Three or four hours later there came the noise of an approaching engine; then the bumping and banging of coupling up. After a pause we started rumbling off on our journey into the unknown.

I took stock of my new abode and its resources. There was a revolver. This was a moral support, though it was not easy to see in what way it could be helpful. There were two roast chickens, some slices of meat, a loaf of bread, a melon and three bottles of cold tea. The journey to the sea was not expected to take more than sixteen hours, but no one could tell what delay might occur to ordinary commercial traffic in time of war.

All day long and most of the following day we traveled eastward through the Transvaal. Late in the afternoon of the second day we reached the dreaded Komati Poort. Peeping through a chink, I could see this was a considerable place. Numbers of people were moving about. There were many voices and much shouting. I retreated into the very center of my fastness, and covering myself up with a piece of sacking lay flat on the floor of the car and awaited developments with a beating heart.

Three or four hours passed; I did not know whether we had been searched or not. Several times people had passed up and down the train talking in Dutch. But no special examination seemed to have been made of the car. Meanwhile darkness had come on, and I had to resign myself to an indefinite continuance

of my uncertainties. It was tantalizing to be held so long in jeopardy after all these hundreds of miles had been accomplished, and I was now within a few hundred yards of the frontier. I wondered about the dangers of snoring. But I slept without mishap.

We were still stationary when I awoke. Perhaps they were searching the train so thoroughly that there was consequently a great delay! Or perhaps we were forgotten and would be left on the siding for days. I was greatly tempted to peer out, but I resisted. At last we were coupled up and almost immediately started. If I had been right in thinking that the station in which we had passed the night was Komati Poort, I was already in Portuguese territory. But perhaps I had made a mistake. Perhaps there was still another station before the frontier. At the next station I peered through my chink and saw the uniform caps of the Portuguese officials on the platform. I restrained all expression of my joy until we moved on again. Then, as we rumbled and banged along, I pushed my head out of the tarpaulin and sang and shouted and crowed at the top of my voice. Indeed, I was so carried away that I fired my revolver two or three times in the air as a *feu de joie*. None of these follies led to any evil results.

It was late in the afternoon when we reached Lourenço Marques. My train ran into a yard, and a crowd of Kaffirs advanced to unload it. I thought the moment had now come for me to quit my hiding place, in which I had passed nearly three anxious and uncomfortable days. I slipped out and mingling unnoticed with the Kaffirs and loafers in the yard—which my slovenly and unkempt appearance well fitted me to do—I strolled my way towards the gates and to the streets.

Burgener was waiting outside the gates. We exchanged glances. He turned and walked off, and I followed twenty yards behind. We walked through several streets; presently he stopped and stood for a moment gazing up at the roof of the opposite house. I looked in the same direction, and there—blessed vision!—I saw the gay colors of the Union Jack. It was the British Consulate.

The secretary of the British consul evidently did not expect my arrival. "Be off," he said. "The consul cannot see you today. Come to his office at nine tomorrow, if you want anything."

At this I became so angry, and repeated so loudly that I insisted on seeing the consul personally at once, that that gentleman himself looked out of the window and finally came down to the door and asked me my name. From that moment every resource of hospitality and welcome was at my disposal. A hot bath, clean clothing, an excellent dinner, means of telegraphing—all I could want. Happily the weekly steamer was leaving for Durban that very evening; in fact, it might almost be said it ran in connection with my train. On this steamer I decided to embark.

The news of my arrival spread like wildfire through the town, and while we were at dinner the consul was at first disturbed to see a group of strange figures in the garden. These, however, turned out to be Englishmen fully armed who had hurried up to the consulate determined to resist any attempt at my recapture by the many Boers and Boer sympathizers at Lourenço Marques. Accordingly under a heavy patriotic escort I marched safely through the streets to the quay.

I reached Durban to find myself a popular hero. I was received as if I had won a great victory. The harbor was decorated with flags. Bands and crowds thronged the quays. The admiral, the general, and mayor pressed on board to grasp my hand. I was nearly torn to pieces by enthusiastic kindness. I was carried on the shoulders of the crowd to the steps of the town hall, where nothing would content them but a speech, which after a becoming reluctance I was induced to deliver. Sheaves of telegrams from all parts of the world poured in upon me, and I started that night for the army in a blaze of triumph.

Here, too, I was received with the greatest goodwill. I took up my quarters within one hundred yards of the spot where I had a little more than a month before been taken prisoner, and there in the company of many friends I celebrated my good fortune and Christmas Eve.

* * *

I found that during the weeks I had been a prisoner of war my name had resounded at home. The British nation was smarting under a series of military reverses, and the news of my outwitting the Boers was received with enormous and no doubt disproportionate satisfaction. This produced the inevitable reaction, and an undercurrent of disparagement, equally undeserved, began to mingle with the gushing tributes. Criticism was also excited by a telegram which I sent to the *Morning Post* from Durban.

"Reviewing that whole situation," I wrote, "it is foolish not to recognize that we are fighting a formidable and terrible adversary. We must face the facts. The individual Boer, mounted in suitable country, is worth from three to five regular soldiers."

These unpalatable truths were resented. Quoth the *Morning Leader*: "We have received no confirmation of the statement that Mr. Winston Churchill has been appointed to command the troops in South Africa, with General Sir Redvers Buller, VC, as his chief of staff."

Unhappily this was sarcasm. However, my opinions were vindicated by events. More than a quarter of a million British soldiers, or five times the total Boer forces, stood on South African soil before success was won.

While my personal fortunes had been undergoing these vicissitudes, military disasters in South Africa had aroused the British nation. Sir Redvers Buller had been once repulsed in an attempt to relieve Ladysmith. Meanwhile the German Emperor, in a curiously friendly mood, had sent a personal message to Queen Victoria, saying: "I cannot sit on the safety valve forever. My people demand intervention. You must get a victory. I advise you to send out Lord Roberts and Lord Kitchener." Whether upon this suggestion or otherwise, Lord Roberts was, on December 16, appointed to the chief command, with Lord Kitchener as chief of staff. Reinforcements, comprising the entire British army outside India with powerful volunteer additions from home and the colonies, were set in motion towards

South Africa. Buller, strongly reinforced, was assigned the command in Natal with orders to persevere in the relief of Ladysmith, while the main army was to advance northwards from the Cape Colony to relieve Kimberley and capture Bloemfontein.

After Sir Redvers Buller had examined me at length upon the conditions prevailing in the Transvaal, he consented to my request for a commission in one of the irregular corps which were being improvised—but with the condition that, since I was still under contract with the *Morning Post,* I was to receive no pay for my army service. To this irregular arrangement I made haste to agree.

Behold me, then, restored to the army with a lieutenant's commission in the South African Light Horse, a regiment of six squadrons and over seven hundred mounted men, raised in the Cape Colony by Colonel Julian Byng, an officer from whom great things were rightly expected. I stitched my badges of rank to my khaki coat and stuck the long plume of feathers from the tail of the *sakabulu* bird in my hat, and lived from day to day in perfect happiness.

Meanwhile Sir Redvers Buller, strongly reinforced, made ponderous movements towards the relief of Ladysmith. Several serious reverses were suffered as a result of the leisureliness which marred all Buller's movements. However, in spite of the vexatious course of the war, the two months' fighting for the relief of Ladysmith make one of the happiest memories of my life. Although our irregular cavalry brigade was engaged with the enemy on at least three days out of five, our losses were not severe.

Day after day we rode out in the early morning, galloped around or clamored up the rocky hills, caught glimpses of darting, fleeing Boer horsemen in the distance, heard a few bullets whistle, had a few careful shots and came safe home to a good dinner and cheery, keenly intelligent companions. Meanwhile I dispatched a continual stream of letters and cables to the *Morning Post* and learned from them that all I wrote com-

manded a wide and influential public. Altogether there was an air of grace and amenity about this war singularly lacking fifteen years later on the Western Front.

Buller now began his fourth attempt to relieve Ladysmith; the garrison was on starvation rations, and fast devouring its horses and mules. Sir George White declared that he could hold out, but he had no longer any mobility to cooperate with us. He could just sit still and starve as slowly as possible. The outlook was therefore bleak.

After two weeks of heavy and confused fighting, on February 17 the Natal army delivered its final attack. The last row of hills between us and Ladysmith had fallen. Mounting in haste we galloped out, hoping to pursue the enemy. The commander in chief met us and sternly ordered us back. "Damn pursuit!" were said to be the historic words he uttered on this occasion. As one might say, "Damn reward for sacrifices! Damn the recovery of debts overdue!"

The next morning advancing in leisurely fashion, we crossed the river, wended up and across the battle-scarred heights and debouched upon the open plain which led to Ladysmith six miles away. The Boers were in full retreat, and the dust of the wagon trains trekking northwards rose from many quarters of the horizon. The order "Damn pursuit!" still held. All day we chafed and fumed, and it was not until evening that two squadrons on the South African Light Horse were allowed to brush through the crumbling rear guards and ride into Ladysmith. I rode with these two squadrons, and galloped across the scrub-dotted plain, fired at only by a couple of Boer guns. Suddenly from the brushwood up rose gaunt figures waving hands of welcome. On we pressed, and at the head of a battered street of tin-roofed houses met Sir George White on horseback, faultlessly attired. Then we all rode together into the long beleaguered, almost starved-out Ladysmith. It was a thrilling moment.

I dined with the headquarters staff that night. Jealously preserved bottles of champagne were uncorked. The last trek ox had been slain in honor of the occasion. Our pallid and emaci-

ated hosts showed subdued contentment. Having traveled so far and by such rough and devious routes, I rejoiced to be in Ladysmith at last.

The main force of the British army, meanwhile, had consolidated its strength in the Cape Colony, and, under the command of Lord Roberts, had advanced as far as Bloemfontein, some three hundred miles to the south of Pretoria. This, I saw, was now to be the decisive and main theater of the war. On the free and easy footing which had been accorded me since my escape from Pretoria, it was not difficult for me to obtain indefinite leave of absence from the South African Light Horse, and without resigning my commission to transfer my activities as a correspondent to Lord Roberts's army. The army headquarters had lain for two months in Bloemfontein, and when I arrived there, great was the bustle before the advance. I was equipped by the *Morning Post* on a munificent scale with good horses and transport.

Then began a jolly march, occupying about six weeks and covering in that period about five hundred miles. The wonderful climate of South Africa, the magnificent scale of its landscape, the life of unceasing movement and of continuous incident made an impression on my mind which even now recurs with a sense of freshness and invigoration. Every day we saw new country. Every evening we bivouacked—for there were no tents—by the side of some new stream. We lived on flocks of sheep which we drove with us, and chickens which we hunted round deserted farms. My wagon had a raised floor beneath which were the best tinned provisions and alcoholic stimulants which London could supply.

I moved from column to column, wherever there was a chance of fighting. Riding sometimes quite alone across wide stretches of doubtful country, I would arrive at the rear guard of a British column, actually lapped about by the enemy in the enormous plains, stay with them for three or four days if the general was well disposed, and then dart back across a landscape charged with silent menace, to keep up a continuous stream of letters and telegrams to my newspaper.

All day long I scampered about the moving cavalry screens searching in the carelessness of youth for every scrap of adventure, experience or copy. Nearly every day as daylight broke and our widespread array of horse and foot began to move, the patter of rifle fire provided the exceptional thrills of active service. Sometimes there were regular actions in which large bodies of troops were seen advancing against hills and ridges held by skillful, speedy and ubiquitous mounted Boers. Every few days a score of our men cut off, ambushed, or entrapped, made us conscious of the great fighting qualities of these rifle-armed horsemen of the wilderness who hung upon the movements of the British forces with sleuthlike vigilance and tenacity.

The Boers, although ready to evacuate Johannesburg, sent a strong force to oppose the advance of our column at a point called Florida. Here on June 1, 1900, a sharp action was fought. On the morrow of this action, our column lay across the main road to the west of Johannesburg. Twenty miles away to the south of the city was the point where Lord Roberts's headquarters should now have arrived. No means of communication existed between the two forces. Johannesburg was still in the hands of the enemy, and to circumnavigate the city meant a detour of nearly eighty miles. A more speedy means of communication with the commander in chief was at that juncture extremely important. Civilians who came out of the city gave conflicting accounts of the conditions inside. The Boers were clearing out, but they were still there. A young Frenchman assured me that it would be quite easy to bicycle through the city in plain clothes; the chances of being stopped during the closing hours of an evacuation were remote. He offered to lend me a bicycle and to guide me himself. I decided to make the attempt.

Our commander gave me his dispatch, and I also had my own telegrams for the *Morning Post*. We started in the afternoon and bicycled straight down the main road into the city. We were soon in the streets of Johannesburg and I experienced a distinct sensation of adventure. Darkness was already falling. But num-

bers of people were about, and I saw among them armed and mounted Boers. I was a British officer, disguised in plain clothes, secretly within the enemy's lines, and if I were arrested my situation would be disagreeable.

We had to walk our bicycles up a long steep street, and we heard behind us the overtaking approach of a slowly trotting horseman. To alter our pace would have been fatal. In a few moments the horseman was alongside. He reined his horse to a walk and scrutinized us attentively. He had his pistol in his holster, and three bandoliers of cartridges. We continued thus to progress three abreast for what seemed to me an uncommonly long time. Then our unwelcome companion, touching his horse with a spur, drew again into his trippling trot and left us behind.

Some miles farther on, as the streets of Johannesburg began to melt into the country, we met the first soldiers of Lord Roberts's forces. My companion and I bicycled on along the main road till we found the headquarters of the leading division. From there we were directed to the general headquarters nearly ten miles farther south. There, while being most hospitably entertained, I gave a full account of the situation to Lord Roberts.

Pretoria capitulated four days later. Enormous spans of oxen had dragged two 9.5-inch howitzers, the cow-guns as they were called, all these hundreds of miles to bombard the forts; but they were never needed after all.

Nevertheless my re-entry of the Boer capital was exciting. Early on the morning of June 5 my cousin, the Duke of Marlborough—one of the staff officers—and I rode out together and soon reached the head of an infantry column already in the outskirts of the town. There were no military precautions, and we arrived, a large group of officers, at the closed gates of the railway crossing. Quite slowly there now steamed past our eyes a long train drawn by two engines and crammed with armed Boers whose rifles bristled from every window. We gazed at each other dumbfounded at three yards' distance. A single shot would have precipitated a horrible carnage on both sides.

Although sorry that the train should escape, it was with unfeigned relief that we saw the last carriage glide away past our noses.

Then Marlborough and I cantered into the town. We knew that the officer prisoners had been removed from the State Model Schools, from which I had escaped, and we asked our way to their present place of confinement. When we found the prison camp, a long tin building surrounded by a dense wire entanglement, I raised my hat and cheered. The cry was instantly answered from within. What followed resembled the end of an Adelphi melodrama. We were only two, and before us stood the armed Boer guard of fifty-two men with their rifles at the ready. Marlborough, resplendent in the red tabs of the staff, called on the commandant to surrender forthwith, adding by a happy thought that he would give a receipt for the rifles.

The prisoners rushed out into the yard, some in uniform, some in flannels, hatless or coatless, but all violently excited. The sentries threw down their rifles, the gates were flung open, and while the last of the guard stood uncertain what to do, the long-penned-up officers surrounded them and seized their weapons. Someone produced a Union Jack, the Transvaal emblem was torn down, and amidst wild cheers the first British flag was hoisted over Pretoria.

Time: 8:47, June 5.

Tableau!

I had one more adventure in South Africa. Our operations were at an end. The war had become a guerrilla war and promised to be shapeless and indefinite. With the consent of the authorities I resumed my full civilian status and took the train for Cape Town.

All went well till, about a hundred miles south of Johannesburg, the train stopped with a jerk. We got out; at the same moment there arrived almost at our feet a shell from a small Boer gun. It burst with a startling bang, throwing up clods

from the embankment. A hundred yards ahead of us a temporary wooden bridge was in flames. The train was enormously long, and crowded with soldiers from a score of regiments. No one was in command. The soldiers began to get out of the carriages in confusion. I saw no officers.

Kopjes Station, where there was a fortified camp surmounted by two five-inch guns, was three miles back. My memories of the armored train made me extremely sensitive about our line of retreat. I therefore ran to the engine, climbed into the cab, and ordered the engine driver to blow his whistle to make the men re-entrain, and steam back instantly to Kopjes Station. He obeyed. While I was standing on the footplate to make sure the soldiers had got back into the train, I saw, less than a hundred yards away in the dry watercourse under the burning bridge, a cluster of dark figures. These were the last Boers I was to see as enemies. The engine started, and we were soon all safely within the entrenchment at Kopjes Station.

I thought for many years that the Boer shell which had burst so near us on the embankment was the last projectile I should ever see fired in anger. This expectation proved unfounded.

When the Boer military power had been broken, the first thoughts of the British Government were to let bygones be bygones. An undersecretary, Lord Wolverton, was allowed to make a speech in this sense. All my instincts acclaimed this magnanimity. I had sent a dispatch to my paper, urging a moderate course in the treatment of enemy sympathizers in the occupied territories. This message was ill received in England.

A vindictive spirit ruled. The undersecretary had been suppressed; and I bore the brunt of Conservative anger. Even the *Morning Post,* while printing my messages, sorrowfully disagreed with my view. The Natal newspapers were loud-voiced in condemnation. I replied that it was not the first time that victorious gladiators had been surprised to see thumbs turned down in the imperial box.

Sir Alfred Milner, the high commissioner in South Africa, was far more understanding. He said, "I thought they would be upset by your message. Of course, all these people have got to live together. They must forgive and forget, and make a common country. But now passions are running too high. People who have had their friends or relations killed, or whose homes have been invaded, will not hear of clemency till they calm down. I understand your feelings, but it does no good to express them now."

I was impressed by hearing these calm, detached, broad-minded opinions from the lips of one so widely portrayed as the embodiment of rigid uncompromising subjugation. In the event, for all the fierce words, the treatment accorded to rebels and traitors by the British Government was indulgent in the extreme.

Here I must confess that all through my life I have found myself in disagreement alternately with both the historic English parties. I have always urged fighting wars and other contentions with might and main till overwhelming victory, and then offering the hand of friendship to the vanquished. Thus I have always been against the pacifists during the quarrel, and against the jingoes at its close.

Once, asked to devise an inscription for a monument in France, I wrote, "In war, Resolution. In defeat, Defiance. In victory, Magnanimity. In peace, Goodwill." The inscription was not accepted.

Those who can win a war well can rarely make a good peace, and those who could make a good peace would never have won the war. It would perhaps be pressing the argument too far to suggest that I could do both.

Most people in England thought that the war was over, now that Pretoria was taken. They gave themselves up to rejoicings. But the government knew better. They had allowed themselves to be drawn on by the tides of success into an arbitrary and dangerous position. There was to be no negotiation with the Boer republics. They were simply to be blotted out. If the Boers liked to come in and surrender either singly or under their generals, they would get very good treatment, and ultimately, after

enough English had settled in the conquered territory to make it safe, they would be given self-government as in other British colonies. Otherwise they would be hunted down or caught even to the very last man. As Lord Milner put it some time later on, "in a certain sense the war would never be ended"; it would just fade away.

This was an error destined to cost us dear. There were still many thousands of wild, fierce, dauntless men under leaders like Botha and Smuts, who now fought on in their vast country not for victory, but for honor. The flames of partisan warfare broke out again and again behind the armies in regions completely pacified. This long-drawn struggle bred shocking evils. The roving enemy wore no uniforms of their own; they mingled with the population, lodged and were succored in farmhouses whose owners had taken the oath of neutrality, and sprang into being, now here now there, to make some formidable and bloody attack upon an unwary column or isolated post. To cope with all this the British military authorities found it necessary to clear whole districts and gather the population into concentration camps. The policy of burning farms whose owners had broken their oath, far from quelling the fighting Boers, only rendered them desperate. The British on their side were incensed against the rebels, oath breakers, and Boers who wore captured British uniforms mainly because they had no other clothes, but sometimes as a treacherous stratagem. However, very few persons were executed, and to the very end the Boer commandos did not hesitate to send their wounded into the British field hospitals. Thus humanity and civilization were never wholly banished, and both sides preserved amid frightful reciprocal injuries some mutual respect during two harsh years of waste and devastation. All this, however, lay in the future.

I returned to England in a more fortunate situation. My capture and escape had been followed with intense interest by the public, and this popularity made it possible for me to enter upon the political career to which I had long aspired. The Conservative government had already been in office for five

years, and a general election was therefore due within the next eighteen months. The party leaders determined to appeal to the country before the enthusiasm of victory had died down. In this way all the Liberals, even those who had most loyally supported the war measures, could be lapped in a general condemnation as "Pro-Boers." Mr. Chamberlain uttered the slogan, "Every seat lost to the government is a seat gained to the Boers," and Conservatives generally followed in his wake. The general election took place in September 1900.

In view of my war activities, therefore, it was natural that I should be offered the chance of a seat in Parliament. I was designated again as one of the two candidates for the Lancashire district of Oldham. This time at the start of my campaign I received the warmest of welcomes. Almost without distinction of the party the town awarded me a triumph. I drove to a tremendous meeting in the Theatre Royal through streets crowded with enthusiastic mill girls, and there I described my now famous escape. When I mentioned the name of Mr. Dewsnap, the Oldham engineer who had been Mr. Howard's assistant, the audience shouted: "His wife's in the gallery." There was general jubilation.

In those days a general election was by law spread over nearly six weeks. Instead of all the electors voting blindly on one day, and only learning the next morning what they had done, national issues were really fought out, and the national decision was reached in measured steps. Oldham being almost the first constituency to poll, the result was awaited with intense national interest.

Although at the time the Conservatives had a large permanent majority in the English electorate, and the prevailing wave of opinion was with them, in Oldham the Liberals and Labourists were very powerful. So it was that when we came to count the votes it soon became evident that the senior Liberal candidate would head the poll. However, it appeared that about two hundred Liberals who had voted for him had given their second votes to me out of personal goodwill and war feeling. I

was elected to the House of Commons by the modest margin of 230 votes!

For three weeks after this I had what seemed to me a triumphal progress through the country. I spoke in support of other candidates, and quite a lot of victories followed in my train. I was twenty-six. Was it wonderful that I should have thought I had arrived? But luckily life is not so easy as all that: otherwise we should get to the end too quickly.

For one thing I very soon found myself in marked reaction from the dominant views of the Conservative Party, and drifting steadily to the left. I helped to found a small parliamentary society nicknamed "The Hooligans." We dined every Thursday in the House and always invited one distinguished guest. All the leading men on both sides came. One night we were to have Mr. Chamberlain, the Secretary of State for the Colonies, as our dinner guest. "I am dining in very bad company," he observed, surveying us with a challenging air. We explained our objections to certain government actions. How could we be expected to support them? "What is the use," he replied, "of supporting your own government only when it is right?"

The world with which these pages have dealt, the structure and character of the Conservative Party, the foundations of English governing society, all were soon to be separated from us by gulfs and chasms such as have rarely opened in so brief a space. Little could we foresee how strong would be the tides that would bear us forward or apart with resistless force; still less the awful convulsions which would shake the world and shiver into fragments the structures of the nineteenth century.

For myself, I was busily engaged in political affairs which absorbed my thoughts and energies at least until September 1908, when I married and lived happily ever afterwards.

Thomas Edison

A Select Edition of

EDISON: A BIOGRAPHY

by Matthew Josephson

"Genius is ninety-nine percent perspiration and one percent inspiration."

THOMAS EDISON

ONE

Childhood and Boyhood

The village of Milan, Ohio, where Thomas A. Edison was born, now seems a rural backwater, with its old tree-shaded central square and its quiet lanes of white wooden frame houses. In its heyday Milan was one of the boomtowns of the Middle West, where a man of energy might well grow up with the country. For over twenty years a flood of immigrants from the East Coast, mainly Yankees, but also recent arrivals from Europe, had been moving up the Erie Canal to settle on the virgin soil of the Western Ridge.

Here Edison's father, Samuel Ogden Edison, Jr., a native of Canada, had halted in the summer of 1838, and put down his stakes. Like a good many of his fellow immigrants he had left his troubles behind him and had journeyed to thriving Ohio in the hope of bettering his fortune.

Milan was situated on the Huron River, eight miles inland from Lake Erie; but at the time Samuel Edison, Jr., arrived, construction work on a canal extending northward to the navigable part of the river, and so giving access to Lake Erie's broad waterway, was going on full blast. Sam Edison, experienced in the lumber trade, looked at the busy scene and resolved to take up the business of supplying timber and roofing material for the greater Milan that was to come.

Edison, who in his youth was something of a hothead, had departed from Canada rather suddenly, about six months ear-

lier. The descendant of a hardy and restless clan, part Dutch and part English, he was then still in his early thirties. Unhappily, he had been forced to leave his wife and four young children behind him in Ontario Province until he establish himself in the States. With the help of his family he was able to raise a little money and for seven or eight months he worked zealously to set up his shingle mill. Some help was given him also by an American friend, Captain Alva Bradley, a future merchant prince whose ships and barges plied Lake Erie.

By the spring of 1839 Edison had hired a few men and was ready for business. Now at last he was able to bring his wife and children across the lake on one of Bradley's barges. After living in temporary quarters for about a year, the Edisons purchased, for the sum of $220, a town lot of an acre on Choate Lane, situated at the edge of the hogback, or bluff, that overlooked the Huron Canal Basin where the shingle mill stood. Here, in 1841, Sam Edison with his own hands built a tidy house of wood-frame and brick construction, using lumber from his own mill. It was to be the Edisons' home for many years.

The 1830's and 1840's marked the height of the canal craze in America. Before the coming-of-age of the Iron Horse, states and towns all but ruined themselves to finance the waterways that would give this nation a desperately needed transport system. Thus Milan boomed. Six hundred wagons a day arrived from points within a radius of 150 miles, enough to fill twenty vessels and barges with 35,000 bushels of wheat each day. Soon fourteen grain warehouses lined the basin, most of them roofed with Sam Edison's seasoned pine shingles. For a period everything and everyone here seemed to prosper, including Sam Edison.

The Edison family reunion in the United States was signalized by the arrival of more children. Sam's wife, Nancy, had brought four with her on coming to Ohio in 1839: Marion, the eldest daughter, then ten; William Pitt, eight; Harriet Ann, six; and Carlile, four. Now, in 1840, Samuel Ogden II followed, and four years later, Eliza. Unfortunately, the Lake Erie region is

subject to severe winter storms; the Edison children suffered sorely from colds and from infantile diseases. Soon after being brought to Milan, in 1841, Carlile died at the age of six. Then soon afterward, to Nancy Edison's great sorrow, the lately born Samuel II and Eliza were taken from her in their infancy. Within a few years half of her children were dead.

Nancy Edison, the daughter of a Baptist minister, the Reverend John Elliott, was of Scotch-English and Yankee descent. She had been a schoolteacher before she married and was very different in character from the Edisons; she was small in size, but she showed much patience and inner strength against adversity. She was more than usually intelligent and had absorbed from her own estimable family, the Elliotts, a love of learning as well as devotion to religion.

She was already middle-aged when, in the dead of winter, she awaited the birth of her seventh, and last-born, child. It was to be a son with fair hair, large blue eyes, and a round face, who strikingly resembled the mother but seemed unusually frail and perhaps, as the Edisons said, "defective." His head was so abnormally large that the village doctor thought he might have brain fever. Nancy greatly feared for the life of this new child, who arrived in the world during the early hours of February 11, 1847, following a night of heavy snowfall. Later that morning Sam Edison, Jr., ran along the hogback to get medicine at the pharmacist's in the village square, announcing to all his neighbors that a son had been born to him. The parents christened the boy Thomas, after a brother of the father, and added the middle name "Alva" in honor of their friend Captain Bradley. Thus, Thomas Alva Edison.

One morning in 1853 a knot of people gathered together in the cobbled square of Milan to look on at a strange rite: Sam Edison, the lumber and feed dealer, was whipping his youngest son, Alva, in the village square. It was like a scene out of the time of the Puritans in New England.

The youngest Edison boy was something of a problem child. He was of a decidedly mischievous bent and was forever

falling into scrapes. The latest and most serious of these had resulted in the burning of his father's barn in the yard below the house. Alva had set a little fire inside the barn "just to see what it would do," as he innocently enough explained it. The flames had spread rapidly; though the boy had managed to escape from the barn, the whole town might have gone up in smoke if there had been a strong wind. Hence his father had devised a punishment to fit the crime.

While in later years Alva spoke with marked affection of his mother, there is no record of his having ever said anything complimentary on the subject of his father. He was always a loyal son. However, the little that he did say in recollection suggested clearly that there was no understanding between them. ". . . My father thought I was stupid, and I almost decided I must be a dunce," was one of Edison's few plain references to his parent.

His father said on a number of occasions that he could make nothing of his son and that the boy seemed wanting in ordinary good sense. He was trying, he was vexing, he was forever curious, and forever asking "foolish questions." The harsh punishment visited so publicly on Alva, meanwhile, did not serve to make him mend his ways, or even to keep him from playing his little tricks on people. He seemed to be one who just grew in his own way.

The tales collected about his childhood show him to have been a grave infant who seldom cried. For some years he slept in a crib in the tiny windowless attic room under the eaves which he shared with two other much older Edison children, Harriet Ann and Pitt.

He seems to have had few childhood companions, and he played alone with his toys a good deal of the time. One of his earliest memories was the sight, in 1850, of long trains of prairie schooners drawn up in the narrow roads of Milan; these people, he was told, were going to the gold fields of California. But where was "California"? and what was "gold"?

As soon as he could talk he began to ask his parents and everyone else his interminable questions. There were so many

"whys" and "wheres" and "whats" that Sam Edison said that he often felt himself reduced to exhaustion. Alva's mother, however, was more patient.

"Why does the goose squat on the eggs, Mother?"

"To keep them warm," she replied.

"Why does she keep them warm?"

"To hatch them, my dear."

And what was hatching? "That means letting the little geese come out of the shell; they are born that way."

"And does keeping the eggs warm make the little geese come out?" he went on breathlessly.

"Yes."

That afternoon he disappeared for hours. At length his father found him "curled up in a nest he had made in the barn, filled with goose eggs and chicken eggs. He was actually sitting on the eggs and trying to hatch them." Such a little goose he was—yet a *logical* goose!

Toward the age of five or six, there was a whole phase of misadventures and scrapes. Once he fell into the canal and had to be fished out. On another occasion he disappeared into the pit of a grain elevator and was almost smothered before he was rescued. He was nothing if not inquisitive.

Down at the canal basin there was the big steam-driven flour mill of an eccentric Yankee named Sam Winchester. Often the small Edison boy would be found with his nose pressed against the back window of Winchester's shop watching the strange things being done there. His father scolded him severely for hanging about that place and spanked him for going there again after being warned not to do so. The mysterious Winchester ("The Mad Miller of Milan") was not grinding flour, but was constructing a passenger balloon. The hydrogen he had used for this purpose had burned down his first flour mill. The boy Tom Edison knew about these experiments and about Winchester's first, abortive attempt at flight. Some years later, during a second trial, Mr. Winchester managed to ascend into the air, then was wafted slowly in the direction of Lake Erie, never to be seen again.

Finally there was one tragic accident in which the boy was involved that deeply troubled Edison's parents and that he himself never forgot. He recalled the whole affair in notes written long afterward:

> When I was a small boy at Milan, and about five years old, I and the son of the proprietor of the largest store in the town, whose age was about the same as mine, went down in a gully in the outskirts of the town to swim in a small creek. After playing in the water a while, the boy with me disappeared in the creek. I waited around for him to come up but as it was getting dark I concluded to wait no longer and went home. Some time in the night I was awakened and asked about the boy. It seems the whole town was out with lanterns and had heard that I was last seen with him. I told them how I had waited and waited, etc. They went to the creek and pulled out his body.

Why had he not called for help? Why had he said nothing on returning home? A country boy knew what drowning meant. Was he silent because he felt guilty and feared that he would be censured and beaten? His parents could not help showing their distress at his "strange" behavior. Was this boy "without feelings"? Doubtless they applied the switch again, though whipping did no good. The boy could not but sense his father's disappointment and disapproval of him and feel, though dimly, the weight of this.

What doom, what blight suddenly fell upon the future metropolis that was Milan, Ohio? What happened, simply, was that the Lake Shore and Michigan Southern Railroad came in 1853, but bypassed Milan and ran instead through Norwalk to Toledo.

As Tom Edison said in later years, there was "a collapse of the family fortunes," caused by the reduction of canal tariffs at Milan in competition with the railroad and a depression in the

town that "undermined the social standing of Samuel Edison, forcing him to leave his picturesque home and begin his life anew. . . . This transpired in the year 1854."

Once more the Edison's were on the move, by train and carriage to Detroit and thence by paddle ship up the St. Clair River to Port Huron, Michigan, where they were to settle. Sam Edison had learned that a railroad being extended northward from Detroit would eventually connect with a Canadian line at this point.

Their new home was a large and solidly built house with columned balconies, set in a grove of pine trees. From its big windows there were fine views over the river and lake. The rooms were spacious, and there were four huge fireplaces; the grounds included an orchard, a large vegetable garden, and several outbuildings. There was only one thing wrong with this fine dwelling: the Edisons no longer owned their home, but rented it. Sam Edison used his remaining capital to engage in the lumber, grain, and feed trade.

As the Edisons fortunes declined, for Sam was no steady provider, his wife emerged as the real head of the family. It was she who worked with compulsive energy, cooking and weaving, sewing and crocheting. It was she who struggled to keep the family afloat with the aid of her children, and it was she who educated her youngest son.

On their arrival at Port Huron, Thomas Alva fell seriously ill of scarlet fever. For this or other reasons the boy's entrance into grammar school had been postponed. In the autumn of 1855, when he was more than eight, he was finally enrolled as a pupil in the one-room school of the Reverend G. B. Engle. Mr. Engle, it is related, liked to implant his lessons in his pupils' minds with the help of a leather strap; his wife, who aided in the work of instruction, was said to be even harsher in her methods. It is not surprising, therefore, that the Edison boy, who had been growing up according to his own will, as a sort of child of nature, proved to be somewhat difficult in the classroom.

After he had been at the school about three months, he overheard the schoolmaster one day saying of him that his mind

was "addled." In an outburst of temper, Tom Edison stormed out of the schoolroom and ran home, refusing to return.

The next morning his mother came to see the schoolmaster, and an angry discussion followed. Her son backward? She considered him nothing of the sort and believed she ought to know, having taught many children herself in her youth. The upshot was that she removed the boy from school and declared that she would instruct him herself.

The schooling received from the Engles, according to Edison's later recollections, was utterly "repulsive"—everything was forced on him; it was impossible to observe and learn the processes of nature by description, or the English alphabet and arithmetic only by rote. For him it was always necessary to observe with his own eyes, to "do things" or "make things" himself.

Unlike the other boys in the little town, he stayed at home all day, and every morning, after his mother's preliminary housework was done, she called him to his lessons and taught him his reading, writing, and arithmetic. The affection between mother and son was very strong, especially in these years, when Nancy Edison's relations with her husband grew less happy. She taught her son not only the three R's, but she implanted in his mind the love of learning.

Believing that her son was far from being dull-witted, she read to him from such books at Gibbon's *Decline and Fall of the Roman Empire,* and Hume's *History of England;* also literary classics ranging from Shakespeare to Dickens. Instead of being bored by these words of serious literature, he grew fascinated and at nine was inspired to read such books himself. He soon became a very rapid reader.

Nancy Edison also sensed, or discovered by chance, the real direction of her son's interests; for one day she brought forth an elementary book of physical science, R. G. Parker's *School of Natural Philosophy,* which described and illustrated various scientific experiments that could be performed at home. Now his mother found that the boy had truly caught fire. This was "the first book in science I read when a boy, nine years old, the first I could understand," he later said. Here, learning became a

"game" that he loved. He read and tested out every experiment in Parker; then his mother obtained for him an old *Dictionary of Science,* and he went to work on that. He was now ten and formed a boyish passion for chemistry, gathering together whole collections of chemicals in bottles or jars, which he ranged on shelves in his room. All his pocket money went for chemicals purchased at the pharmacist's and for scraps of metal and wire.

Thus his mother had accomplished that which all truly great teachers do for their pupils: she brought him to the stage of learning things for himself, learning that which most amused and interested him, and she encouraged him to go on in that path. It was the very best thing she could have done for this singular boy.

A corner of the cellar in the Port Huron house was Thomas A. Edison's first laboratory. There, after the age of ten, he secluded himself, often all day long, absorbed in his study of simple chemicals and gases and in the design of his first homemade telegraph set. Other boys might play in the fields or fish in the river; but Tom Edison buried himself in his cellar laboratory, with his elementary manuals and his chemical and electrical outfits.

"Thomas Alva never had any boyhood days; his early amusements were steam engines and mechanical forces," his father commented. Actually, through his own kind of intellectual *play,* the Edison boy was intensely happy—though his father could not understand this. He was also, despite his steam-engine models, very much a boy.

Up to the age of fourteen, and even afterward, he continued to show such high spirits that it was hard to hold him down. Bouts of horseplay alternated with prolonged sessions in elementary physical science and chemistry belowstairs. Accidents occurred, the muffled sounds of explosions sometimes reaching the parents from the cellar. "He will blow us all up!" the anxious father would exclaim. But his mother remained staunch in his defense. "Let him be," she said. "Al knows what he's about."

* * *

Above all things, Tom loved to work over models of the telegraph, introduced into practical, everyday usage not long before his time by Samuel F. B. Morse. By 1848 the telegraph flashed intelligence over a network extending from New York and Boston, via Albany, as far as Chicago. As a boy, Edison followed with intense excitement news of the pioneering bands of young telegraphers who extended their long lines of wire across the prairies, over the Indian-infested deserts and the mountains, to California—so that the continent was first spanned, not by the railroad, but by the telegraph—in 1861, during the opening months of the Civil War.

It was in no way remarkable therefore that Edison in 1858, at the age of eleven, like hundreds of other youths of that time, had his own homemade telegraph set and had begun to practice the Morse code. He became absorbed in learning all that he could of the new electrical science.

What was electricity? Tom Edison kept asking people. A Scotsman, who was a station agent on the new railway that came to Port Huron, finally explained that "it was like a long dog with its tail in Scotland and its head in London. When you pulled its tail in Edinburgh it barked in London."

In working with his first crude telegraph made of scrap metal, Edison the boy was approaching, unwittingly, the mainstream of electrical experiment.

More than pocket money, however, was needed for his expanding "laboratory" in the cellar. He was now bent on making a proper Morse sending-and-receiving set of his own, and these were hard times for the Edisons. At the age of eleven Tom, with the help of a friend, Michael Oates, embarked upon his first commercial venture. The two boys laid out a large market garden and tried raising vegetables. A horse and cart were hired, and soon Tom was driving about the town trucking onions, lettuce, cabbages, and peas. Evidently the business was sponsored and supervised by his mother; the first summer's harvest, so he claimed, netted all of "two or three hundred dollars." Was he a merchant

prince in embryo? However, he quickly tired of this work, as he says, for "hoeing corn in a hot sun is unattractive . . . ."

Even before the railway was formally opened at Port Huron, young Edison had learned that there would be a job on the daily train for a newsboy, who would have the concession of the "candy butcher" to purvey food and sweets to the passengers. He was only twelve, and small for this work, but the family's situation was such that no schooling for the boy could be considered, and Tom was faced by the early necessity of gaining his own living. It was Sam Edison who selected the job and negotiated with the railroad people for his son's employment. But Nancy Edison strongly objected and Tom had to use "great persistence" in bringing his mother around to his idea. He promised that during the long layover of the daily train at Detroit, he would use his time to read books; he would also have money with which to continue his scientific self-education.

An early photograph shows him in a worn old cap and roughly clad, yet most attractive and intelligent-looking, with his fine brow, his wide jaws, and his big smile. The local railroad officials, at any rate, gave him the job.

The "mixed train" of passengers and freight departed from Port Huron daily at 7:00 a.m. on a journey of more than three hours to Detroit, waited there over most of the day, and returned again to Port Huron at 9:30 p.m. As the train pulled out of the station, a lively urchin, carrying a basket almost bigger than himself, quickly scrambled on board and then made his way through the carriages, calling out: "Newspapers, apples, sandwiches, molasses, peanuts!"

Tom Edison was a cheeky fellow and thoroughly enjoyed this new life of movement and active commerce with all sorts of people. In those days he had, as he himself said, a sort of "monumental nerve." Not only did he dispense a stock of candies along with newspapers and magazines, but he also won permission from the conductor to store a quantity of fresh butter, berries, vegetables, and fruit in the baggage car of the train,

which he disposed of at retail along the route. The report of an old news dealer of Detroit shows that he was an honest boy who always did business for cash and paid promptly. He returned home each day long after dark, and gave his mother a dollar from the day's earnings.

There was so much he could learn merely by using his keen eyes. At the railroad yard in Detroit he could watch the men switching cars, or repairing valves and steam boilers. Waiting in the station he observed closely the operations of telegraphers, then beginning to signal train movements between stations.

In Detroit, already a city of over 25,000, he was left to his own devices all day, wandering about with a little money to spend on equipment or books, and talking with men in machine shops. "The happiest time of my life was when I was twelve years old," he said afterward. He was away from home, which was hardly a happy place nowadays; he was away from his father; he was on his own.

After he had been working on the railroad for a year or so, he thought of a way of occupying his leisure time during the layover in Detroit. Since the baggage and mail car had a good deal of empty space, he had the idea of installing his little cellar laboratory at one end of it. The trainman was won to compliance; soon Tom had transported his stocks of bottles, test tubes, and batteries, and ranged them neatly on shelves that were fitted to the back wall of the car. This was, no doubt, the world's first mobile chemistry laboratory.

There he was, adrift on the train like Huckleberry Finn on his raft, restless, inventive, audacious, an almost legendary picture of the eternal American boy making his way in life. But the real picture is not always so pleasing. The hours away from home were long and wearying; leaving at dawn, the young boy would return at ten or eleven at night. There were the sudden blows of life to be borne, even danger to be faced as bravely as he could, at twelve and thirteen.

Then, as if to make life all the harder, there came to him the cruel affliction of deafness. From the symptoms, as described by himself and others, his deafness seems to have been trace-

able to the aftereffects of scarlet fever suffered in childhood, and to have developed through periodic infection of the middle ear that was unattended.

He was, thus, permanently disabled when not yet thirteen. There could be no thought of returning to school for he would not hear his teachers. The prospects for a handicapped boy of a poor family were certainly not good. Nevertheless, he was able to go on working as a trainboy.

It was his habit to make light of his misfortunes. The loss of one of his most vital senses was sometimes represented by him as an advantage or an "asset." He could concentrate, could think something through without interruption. But his intimates declared that he had never really been glad that he was deaf. In the privacy of his brief diary he wrote truthfully, years later, these words of infinite sadness: "I haven't heard a bird sing since I was twelve years old."

That the loss of hearing brought him, in effect, to an important turning point in his life was true. He tended to be more solitary and shy; became more serious and reflective; drove himself to more sustained efforts at reading and study. He had been only "playing," hitherto, with his books and his "experiments." Now he put forth tremendous efforts at self-education, for he had absolutely to learn everything for himself. And whereas he had earlier appeared immature or lighthearted, he now seemed serious, or rather old for his years. It was then that he came to enjoy spending so many long hours alone, wholly lost in his elementary experiments with wet cells and stovepipe wire and his first crude telegraph instruments.

In Detroit, during the hours of layover, he found his way to the public library, becoming in 1862 one of its earliest members. He was given a card numbered 33 and paid the substantial fee of two dollars for it. He relates:

> My refuge was the Detroit Public Library. I started with the first book on the bottom shelf and went through the lot, one by one. I didn't read a few books. I read the library. . . .

* * *

The years when he rode back and forth on the Grand Trunk Railway coincided with some of the most dramatic events in American history. There was the insurrection and the hanging of John Brown, the election of Abraham Lincoln, the firing at Sumter, and the opening of the Civil War. He had noticed that when reports of a battle were printed his newspapers sold faster than on other days. He therefore made it his practice to go to the composing room of the Detroit *Free Press* and inquire what the headlines were on the advance galley proofs for that day's edition, so that he might better estimate his needs.

One day in April 1862 the first accounts of an immense battle between the armies of Grant and Johnston at Shiloh reached the newspaper office by telegraph. Learning that the *Free Press* would carry huge display heads announcing a battle in which 60,000 were then believed to have been killed and wounded, the trainboy conceived a splendid little stroke of business for himself.

> Here was a chance for enormous sales, if only the people along the line could know what had happened. I rushed off to the telegraph operator and gravely made a proposition. . . .

At Edison's request, a short bulletin was to be wired by the Detroit train dispatcher to the railroad stations along the road to Port Huron, and the telegraphers there would be asked to chalk it up on bulletin boards in the depots, before the train arrived. For this free telegraph service Tom Edison would pay the friendly Detroit telegrapher with gifts of newspapers and magazine subscriptions.

Thus forearmed, the boy went to the office of the newspaper's managing editor to ask for a thousand copies of the paper, an uncommonly large assignment, since usually he took but two hundred, and he asked for this on credit. The managing editor examined the ragged boy whose expression, however, was resolute enough. "I was a pretty cheeky boy, and felt desperate,"

he himself recalled later. The authorization was given him and, with the help of another boy, he lugged huge bundles of the newspaper to the train and folded them up.

His device worked even better than he had hoped. In his own vivacious way Edison related:

> When I got to the first station on the run . . . the platform was crowded with men and women. After one look at the crowd I raised the price to ten cents. I sold thirty-five papers. At Mount Clemens, where I usually sold six papers, the crowd was there too. . . . I raised the price from ten cents to fifteen. . . . At Port Huron . . . I was met by a large crowd. I then yelled: "Twenty-five cents, gentlemen—I haven't enough to go around!" It was then it struck me that the telegraph was just about the best thing going, for it was the notices on the bulletin board that had done the trick. I determined at once to become a telegrapher.

It is noteworthy that one of the chief attractions of the telegraph for him was also connected with his bad hearing. *With the telegraph he could hear.* He relates, ". . . From the start I found that deafness was an advantage to a telegrapher. While I could hear unerringly the loud ticking of the instrument I could not hear other and perhaps distracting sounds. . . ."

After learning all he could by studying the apparatus of the dispatching telegraphers, he made an improved sending-and-receiving set of his own device, and rigged up a line from his home to that of a young neighbor a block away. Later, when he was fifteen, he set out a long line of stovepipe wire running about a half mile, strung out on trees, to the home of James Clancy, who sometimes helped him at news vending. On returning home, though it was 10:00 p.m., he would stay up and "play" for hours at sending and receiving messages.

At the beginning of 1862 Tom developed a sudden interest in the craft of printing, and thought of becoming a journalist

and starting his own newspaper. With some money he managed to save at the time of Shiloh, he purchased a small secondhand press, together with some old type; in a short time he had taught himself to set type and run a hand press. Now, putting aside his chemicals, he undertook the venture of editing, printing, and selling a small local newspaper, which was produced in that same baggage car.

The *Weekly Herald,* issued from a branch of the Grand Trunk Railway, at eight cents a copy, had a circulation of about four hundred. It covered local news and gossip, reports of the railroad service, changes of schedule, and occasional bits of war news received over the wires almost before the regular newspapers had them. But in almost every other line of his text occurred such errors of orthography as "valice," or "villian," or "oppisition," which probably hampered the progress of his gazette.

An adventure of another kind also belongs to this period. Late in the summer of 1862, he had descended at the Mount Clemens station and was waiting on the platform while the train switched back and forth shunting a heavy boxcar out of a siding. The boxcar finally rolled toward the station, when Edison noticed that the little three-year-old son of the stationmaster was playing right on the main track, in the path of the car. In an instant he had thrown aside his bundle of papers, dashed toward the child, and snatched him up in time to avoid the car. The stationmaster, J. U. Mackenzie, was called out, and young Edison handed him his baby, whose life he had saved by his quick action.

Mackenzie was filled with gratitude and expressed a desire to repay him. He had noticed how Tom Edison hung over his telegraph table constantly. On the instant, the happy idea came to Mackenzie of offering to teach the boy to be an operator. Edison fairly leaped at the proposal. He had at that time, in the care of his mother, a hundred or a hundred and fifty dollars from his business coup after the Battle of Shiloh. Mackenzie invited Edison to come and board with his family for a couple of

months, while taking his lessons in telegraphy every night and assisting the train dispatcher. He now gave up half of his newspaper route to another boy so that he could stop off at Mount Clemens and study. He was only fifteen and a bit undersized. But in a few months he would be a real telegrapher.

TWO

The Wanderyears

Tom Edison's wanderyears began when he was only sixteen. In those days the strange new tribe of telegraphers, known as Lightning Slingers, were generally young men already noted for their nomadic or Bohemian habits, traveling light, pitching their tents for a brief season at one place, then journeying on to another that seemed to offer greener pastures. The young Edison could find work almost anywhere, because the need for telegraphers was so urgent during the Civil War.

As a tramp operator Edison traveled thousands of miles in the Middle West, South and East. His apprenticeship was to be uncommonly long, and he was to be well acquainted with hardship, which he bore with the rollicking spirit usually affected by the brethren of the key, many of them hard-drinking, free-living fellows. His "university" was to be the tough, workaday world during a turbulent era of war and reconstruction; it was nightwork in shabby telegraph or railroad offices; it was solitude and study in squalid rooming houses.

He might have lost his way or gone downhill, like so many others, in that long, often unhappy interlude of his youth. Yet when these arduous years were gone and he had come to manhood, something of iron had entered into him. What he had seen and learned marked him with sharply individual traits of character and mind.

* * *

By the winter of 1863 he had absorbed all that Mackenzie could teach him and he returned to Port Huron. There the operator of the little telegraph office in Thomas Walker's jewelry and bookstore had gone off to war, and the place was offered to Tom Edison. The volume of telegrams handled was small; but even this Edison would neglect, to pore over Walker's back numbers of the *Scientific American,* or play with electrical circuits of his own device. What vexed Mr. Walker more was that the impetuous boy would make free with his fine watchmaking instruments, using them to cut wires or work on corrosive primary cells.

The following May Edison went to work as a night-shift railroad dispatcher at Stratford Junction, about forty miles from Port Huron. The job required that he await messages and signal trains or stations according to a stated schedule. Traffic, however, was light; Edison found ways of occupying the hours of this night-owl life by reading or by working over some mechanical device.

One the Grand Trunk Railway it was the rule to have the station operators signal to the office of the train dispatcher at certain hours, to guarantee that they were attentive to their duty. Edison's "sixing" signal, so-called, came over quite punctually at the right hours. But after a while it was noticed at the central control office that, when the train dispatcher there tried to reach Stratford Junction following Edison's signal that he was on the alert, no response came. This was queer; the train dispatcher's office soon investigated the new operator.

What was discovered was that the youth had devised a clockwork attachment, having a wheel with a notched rim, which, at a given hour, automatically transmitted by telegraph the dots and dashes making the "sixing" signal. The device was conceived with a purpose; for in the small hours of the night, with no train movements to signal, he had formed the habit of taking catnaps. The railroad officials, however, were not amused at Edison's ingenuity.

In one year, when he was seventeen, Tom Edison held four jobs in as many different towns. After losing his job at

Stratford, he went to a railroad junction at Adrian, Michigan, at seventy-five dollars a month; then, on being fired for some small act of insubordination, he moved on to Fort Wayne, only to be dismissed soon afterward. Next we find him listed as a second-class operator on the payroll of Western Union's office at Indianapolis. By mid-February 1865 he had shifted to Cincinnati's large Western Union headquarters. He was a rolling stone in those days; his low rating gave him little tenure. In most cases he was fired, either because he was not amenable to office discipline, or was at times inattentive to his duties.

Another cause of trouble was his continual monkeying with some paraphernalia or "invention" that would make the routine work of telegraphy less irksome or allow it to be done more expeditiously. On being sacked again, he would make his way to another town by means of a railroad pass, or on his legs.

Arriving in a strange town to apply for a job, he would usually rent a cheap back room in a boardinghouse, then fill up most of the room with tools, balls of wire, batteries, bottles of chemicals, books. His pockets usually bulged with metal scraps, pliers, and other instruments of the electrician's trade. All the money beyond that needed for his wretched meals he devoted to the purchase of books and equipment, sometimes spending his entire wages an hour after having received half a month's salary.

Edison often lived in vermin-infested bedrooms. The Western Union office in Cincinnati, formerly the site of a large restaurant, was also menaced by armies of rats. One of Edison's first inventions was a "rat-paralyzer," a contrivance made up of two metal plates insulated from each other and connected with a main battery. This machine he laid out in the cellar, and when a rodent chanced to place its forefeet on one plate and its hindfeet on the other, then, as one of his telegrapher friends, Milton Adams, phrased it, "it would render up its soul and depart this earthly sphere."

In Cincinnati Edison made the acquaintance of another telegrapher, Ezar T. Gilliland, a man of some education and

with some skill at mechanical invention; their minds seemed to run in the same path and they became close friends—who were to meet again in later years.

There was a trade union organized at the Cincinnati office when Edison worked there. A delegation of five men from Cleveland simply blew into town, recruited a local branch for the National Telegraph Union, then determined to celebrate the event with a spontaneous walkout and many rounds of beer for all hands. Arriving after the workers had gone—and knowing nothing then of labor unions—Edison found only the office boy on hand. Meanwhile the press report wires clamored for attention. All that night he manipulated the wires single-handed, doing a good deal of "guessing" whenever he fell behind; he was still there in the morning when the office manager arrived. The manager was told, though not by Edison, of what had happened. He studied the files of press copy hanging on the hook, then turned to the one operator and said, "Young man, I want you to work the Louisville wire nights. Your salary will be a hundred and five dollars."

Edison had been receiving much less than that hitherto. He had long hoped to be advanced to the rank of a first-class operator regularly taking press copy as fast as mind and hand could go. This was promotion indeed.

Out of those vagabond years there is little of actual accomplishment for Edison to show, save his experience of the world of men, and the knowledge of his trade. On the other hand there are many bits of evidence to be seen, during those careless years, of Edison's growing mechanical resourcefulness.

The telegraph, in the days before the telephone was invented, held a place of enormous importance. It had entered into use about fifteen years before Edison came to it. Technical improvements were being regularly introduced; yet in the sixties installation was still faulty, cables "leaked" current badly under river crossings, and the Morse register which had lately come into use often faltered under pressure, leaving blanks to be filled in by the operator's imagination.

While he was in Indianapolis in the autumn of 1864, Edison, then seventeen and a half, conceived the idea of a repeating device by which the impressions received from a Morse register could be recorded on a strip of paper and played back on a second instrument at the convenience of the receiving operator, and at a speed he could regulate. The beauty of this scheme was that at periods when a great rush of press copy came at high speed, it could be received at leisure and its messages copied in Roman letters with complete accuracy instead of in haste. It was an ingenious repeating system, but it broke down under pressure.

> The crash came [Edison said] when there was a big night's work—a presidential vote, I think—and copy kept pouring in at top speed, until we fell two hours behind. The newspapers sent in frantic complaints, an investigation was made, and our little scheme was discovered.

Use of the duplicating register was forbidden, and Edison was removed from the press copy desk. Yet experiment with innovations in telegraphic apparatus remained an obsession with him.

A year or so later, after the end of the war, he drifted away from Cincinnati, to work at first in Nashville and then in Memphis, Tennessee. These places were then still under military occupation but telegraphers were in high demand and received as much as $125 a month and rations.

At that time connections by wire between New Orleans and New York were completed only by long detours, that is, by retelegraphing in roundabout fashion from one city to another, with much loss of time and attendant error. Edison then adapted his old repeater device, made up of two Morse registers. "I was the first person to connect New Orleans and New York directly . . . just after the war. I perfected my repeater, which was put on at Memphis and worked without a hitch."

Shortly after this he went to Louisville. The streets were icy, but Edison, having spent his money buying apparatus and books, had no overcoat; his shoes were broken and shapeless, and he was penniless. Fortunately, he found work at the Louisville telegraph office, thanks to his demonstrated skill. At the age of nineteen, as an operator, it was said, he had few equals. Now he conquered his wandering habit for more than a year and, save for a brief excursion or two, remained fixed.

During this period of more than a year, when his life assumed some regularity, his self-education went forward more rapidly. He even tried to teach himself foreign languages. He was, then, no ordinary "tramp operator" but a studious fellow with his nose often in the books and mechanical treatises.

Using the crude instruments of electrical science that were then to be found in provincial cities, he measured and tested things, often trying new combinations of electrical circuits of varying strength and polarity. During those early fumbling investigations he observed many things unseen by others, and acquired experience that was to serve him well.

As he described this phase of his life afterward, his mind was in a tumult, besieged by all sorts of ideas and schemes. During the fairly stationary year in Louisville the "mysteries of electrical force" as applied to the telegraph, and all the future potentialities of electricity obsessed him night and day. It was then that he dared to hope that he would become an inventor—like the famous Samuel F. B. Morse, one of America's "kings of fortune."

There were so many things to be invented! At Memphis, just prior to his coming to Louisville, Edison had pottered about busily with new electrical circuits, over which he hoped to send two messages at the same time. At Louisville's Western Union office he became, once more, passionately absorbed in schemes for reconnecting wiring and batteries for duplex transmission.

He was desperate, feeling himself near a solution, and appealed to a fellow telegrapher who had some savings. If he could but have the loan of one hundred dollars and a little

time he would complete his apparatus. But the other would not entrust his capital to the shabby youth of nineteen. As it happened, a duplex apparatus was not long afterward patented by another inventor, J. B. Stearns, of Boston. Edison always believed that by ill luck and the niggardliness of that man in Louisville he had missed the opportunity to precede Stearns.

In the late autumn of 1867 Edison made his way back to the parental home in Port Huron, as penniless and hungry as ever. It was a sad homecoming. His mother, whom he greatly loved, was transformed by grief. They were about to lose the big "house in the grove" which had been the Edison's spacious home these thirteen years. To Nancy Edison's bitter disappointment, they were forced to move to temporary quarters until a new dwelling could be found. The whole family now made great moan at the evil days that had befallen the Edisons, and the father betook himself elsewhere as often as possible.

It was not a home to remain in any longer than Tom Edison could manage. On the other hand, there was nothing for the mother to be happy over in the erratic career of her Alva. Though he earned a good living for those days, and aided his parents whenever he could, he usually had nothing to show for his labors. In contrast, his elder brother Pitt, employed for long years in the office of the local horsecar line, seemed a solid citizen.

"After stopping for some time at home, I got restless, and thought I would like to work in the East," Edison recalled. A friend had written him from Boston, and Edison wrote inquiring if there was an operator's job there. The reply advised him to come at once to the Western Union office in that city.

Boston was then not only America's "hub of culture," but also her foremost center of scientific learning. At this stage of his development Edison sensed that he needed contact with better sources of technical knowledge and equipment. In the 1850's Boston had already well-established manufacturers of fine electrical equipment. There he would likely find the answers to many problems in electrical science that now tormented him.

How would he travel almost a thousand miles in winter without money? He had lately rendered some assistance to the Grand Trunk Railway by helping to repair their broken electric cable across the St. Clair; and the railway repaid him with a free pass over its line to Boston.

Well might Mr. Horace Greeley of the *Tribune* urge young men to "go West" to seek their fortune; Edison, a son of the West, determinedly rode eastward. Unlike his early wanderings, this remove was purposeful.

After a hazardous journey delayed by blizzards, Edison finally arrived in Boson, walked to the office of Western Union, and applied for a job. With his wide-brimmed hat, his long hair, and baggy clothes, he looked like a real jay from the woolly West. George Milliken, the manager, however, on being shown a letter in Edison's neat writing and receiving assurance that the youth could take press copy for hours on the end at breakneck speed, was impressed. After a five-minute interview he hired Edison, proposing that he begin work at 5:30 p.m. that same day.

His fellow workers thought to initiate the ragged stranger from Michigan by "putting up a job" on him. It was arranged that he should be assigned to the Number One New York wire to receive voluminous press copy for the Boston *Herald,* without making it known to him that he would be expected to keep pace with one of the fastest senders in New York. Edison suspected that something was afoot from the way the Boston operators stood by, looking over his shoulder. The New York operator began slowly, then ran on at top speed, while Edison not only kept pace with him, but sometimes paused to sharpen a pencil, letting the sounder run on. Then the sender began to slur his words, sticking the signals, but Edison was used to this style. Finally, opening the key, he made a telegraphic aside: "Say, young man, charge off and send with the other foot." That "broke up" the New York man, and, in disgust, he turned his instrument over to someone else.

Soon Edison was established in a hall bedroom on Exeter Street, together with an old acquaintance, Milton Adams, fol-

lowing his singular routine of working at his telegraph sounder at night and staying wide-awake most of the day. In the old bookshops on Cornhill he could browse over books, which together with the chemical and metallic junk he accumulated soon filled up his room. Back in the telegraph office by evening, he would sit and draw and dream, until reminded by the chief operator that he must attend to his work. His job was to him a distasteful bondage offering no avenue for his real desires and ambitions.

It was at this time that he bought a secondhand copy of Michael Faraday's two-volume work, *Experimental Researches in Electricity.* It was a red-letter day for him. Edison said in afteryears that this first encounter with the great English scientist's journals was one of the decisive events of his life. Though he had worked up to an early hour of the morning at the telegraph office, Edison began reading the *Experimental Researches* when he returned to his room at 4:00 a.m. and continued throughout the day that followed.

Here at last, for his guidance, was the lucid exposition of Faraday's long searches in the field which most fascinated the young Edison. Best of all, the account of the experiments was wholly free of complicated mathematical formulas. To Edison, Faraday appeared as "the Master Experimenter," whose laboratory notes communicated the highest intellectual excitement—and hope as well. He was filled with determination to learn all he could by repeating the experiments recorded in the master's journals.

To his roommate, Adams, he exclaimed, "I am now twenty-one. I may live to be fifty. Can I get as much done as he did? I have got so much to do and life is so short, I am going to hustle." With that he snatched some pie and coffee, and went off to work on the run, without having slept at all.

From repeated allusions he made in later times, we know that Edison's mind was haunted for ten years by the problems and possibilities of multiplex telegraphy. He now proceeded to carry out a continuous series of experiments with telegraphic

apparatuses. If he could but send two messages over one wire telegraphy would be made up cheap!

Boston fairly teemed in those days with "addicts" of science and with skilled artisans who were would-be inventors. Visiting their shops, studying their products, Edison was kindly received and greatly stimulated. And the Bostonians noticed the stamp of his mind.

In June 1868 a journal carried an article on the subject of "Mr. Thomas A. Edison, of the Western Union Office, Boston," and his invention of a "mode of transmission both ways on a single wire . . . which is interesting, simple and ingenious." This youthful experiment was hardly of prime importance. But the interest it aroused, the fact that a little capital was now offered him to pursue his experiments, made him determined to throw up his job at Western Union and devote his full time to his own projects.

In January 1869 a brief notice in a small telegraph trade journal reported that Thomas A. Edison, formerly an operator, "would hereafter devote his full time to bringing out his inventions." Other notices or advertisements indicated that he had models of his "double transmitter" for sale at four hundred dollars; that he was associated with George Anders in the manufacture of alphabetical dial instruments for private telegraph lines; and that he was located at Charles Williams's shop on Court Street.

From now on he was, at his own risk, an inventor of the free-lance type. There was, perhaps, no vocation in life he might have chosen that would have been more perilous. It was proverbial that inventors for the most part starved, went mad, or at least were ruined in the end. To make an invention, even to possess the talent to do this, was not enough. Capital and plant and the commercial ability to win acceptance for one's product from the public were needed.

At this period numerous electrical experimenters in Boston were devising all sorts of machines that were merely adaptations of the Morse telegraph, such as fire alarms, call boxes, dial telegraphs, printing telegraphs, and stock quotation tickers.

Edison had by now got several irons of his own in the fire. More important, he had been able to persuade several Boston "capitalists" to invest money in his schemes, small sums to be sure, but more than he had ever seen. Shy he might be, but about an idea close to his heart he could become surprisingly eloquent. One Bostonian advanced him five hundred dollars, in return for a half share in future profits from his duplex telegraph. At about the same time he had persuaded another man to invest one hundred dollars as his partner in the development of a telegraphic vote-recording machine.

Having observed the great loss of time attending roll calls for voice votes in Congress and state legislatures, Edison designed an electric vote recorder. This simple telegraph contraption, a crude forerunner of the present-day voting machine, was capable of taking down votes from a legislative gathering by electromagnetic impulse. This was his first operative invention, for which patent was filed in October 1868 at the United States Patent Office in Washington. It was granted, June 1, 1869, as No. 90,646, his first recorded patent.

Edison and his associates then hastened to approach the Massachusetts legislature. When the apparatus was rejected, they went on to Washington and demonstrated the machine before a committee of Congress authorized to purchase such equipment. To the aspiring inventor the committee chairman said chillingly:

> "Young man, that is just what we do *not* want. Your invention would destroy the only hope that the minority would have of influencing legislation. . . . And as the ruling majority knows that at some day they may become a minority, they will be as much averse to change as their opponents."

The idea of hastening the process of vote-taking was abhorrent. "I saw the force of his remarks," Edison recalled, "and was as much crushed as it was possible to be at my age. The electric vote recorder got no further than the Patent Office."

On the sad return journey to Boston, Edison did a heap of thinking and came to the conclusion that hereafter he must confine his efforts to inventing products that were certain to be in "commercial demand." Otherwise his chances of survival as a free-lance inventor were nil.

During the "gilded age" after the Civil War, speculators in gold and securities on all the financial exchanges were greatly dependent on Morse's telegraph. Market quotations were rushed by wire to distant cities and to newspapers. But the mounting pace of speculation required still more complex and swift mechanisms; thus, in 1866 the Gold Exchange in New York had seen the appearance of a telegraphic gold indicator, invented by Dr. S. S. Laws. Connected by wire to outside brokers' offices, the indicator transmitted numerals—denoting momentary changes in the dollar prices of gold—as electrical impulses which could be received in the subscribing brokerage houses on dial instruments which resembled the fare registers in trolley cars.

A year later, a Boston inventor, E.A. Callahan, developed a superior telegraphic apparatus called the "stock ticker." This machine was able to print full stock market quotations as well as gold prices by wire on a moving paper tape. After giving much study to the Callahan apparatus, Edison in 1868 conceived of a number of refinements which he incorporated in his own model of the stock ticker. This was his second invention in order of patents applied for; and for its development he acquired another backer who lent him some money.

A Boston company exploiting Edison's stock ticker succeeded in persuading about thirty subscribers to rent it from them. For a while Edison helped to erect a number of private lines leading from the subscribers' offices to the Gold Exchange in Boston, as had already been done on a larger scale in New York. At this time he also engaged in the business of making and selling private telegraph systems, and had several men working with him to make this apparatus in the one-room workshop that he had hired.

In his early twenties Edison was already a "whirlwind of activity," sleeping little and working at all hours of the night and day. His relations with those who backed his first stock ticker, however, became unpleasant; after differences arose between the partners, his patent rights were sold off to a large telegraph company and, thanks to his want of business experience, Edison received almost nothing for his work on this venture. But he had other irons in the fire and soon turned all his attention to them.

They related to the development of an efficient multiplex telegraph, one that would be capable of carrying two messages over a single wire. Such a duplex telegraph instrument had been invented in earlier years by Europeans, but its impulses remained slow. Joseph B. Stearns, of Boston, had greatly improved the operation of this duplex. With Stearns's apparatus two messages could be sent over the same wire at the same time, but only in opposite directions.

At this period, Western Union had already purchased Stearns's patents and was trying out his device on an experimental basis. Duplexing, if successful, would halve the cost of all telegraph traffic. Edison hoped that his own apparatus would have features that would make it more effective than the older inventor's.

When he felt himself ready for a large-scale trial of his duplex system, he asked for permission to dismantle the whole Boston office of Western Union and reconnect its wiring and batteries according to his new system. This privilege being refused him, he applied to the managers of a rival concern, the Atlantic & Pacific Telegraph Company. The head of their Rochester office showed interest and invited him to try his apparatus over the company's wires between that city and New York.

Edison raised eight hundred dollars on a loan from E. B. Welch, of Boston, to whom he gave both his personal note and an agreement allowing the other man a big share of the profits in the event of success. A model of the new duplexing apparatus was completed and, with the highest hopes, he set off for

Rochester. Before leaving, he had sent minute written instructions to an expert telegrapher who was to work at the other end of the line, in New York. Edison arrived in Rochester on Saturday, April 10, 1869, and waited at the Atlantic & Pacific Telegraph Company's office until the early hours of Sunday morning, when the wires would be entirely clear, so that his experimental trial could begin.

When at last he began to signal, Edison could get no response whatsoever from New York. As he later described the trial, the telegrapher at the New York end failed to do his part. The trouble may have been due to electrostatic charges, or there may have been other "bugs" he had not yet eliminated. After repeated trials carried out on several successive days, Edison gave up and made his way back to Boston.

The moment was desperate. His more or less profitable undertakings had been disposed of for a bagatelle. He was deep in debt thanks to the fiasco of his duplex transmitter. Of late, he seemed to have gone from failure to failure, and now his credit in Boston was virtually ruined. There was no chance of finding new patrons for his experiments. His only hope was to get out of Boston, reach the bigger center of New York, and try his luck there.

He blandly borrowed a few dollars from one of his telegrapher friends and set off for New York by boat, arriving the next morning with not a coin left in his pocket. All his possessions, tolls, and equipment had been left behind; he would have to send for them when he could afford to do so. In effect he had burned his bridges behind him, and not for the first time.

New York, already a vast metropolis and full of uproar, thanks to its endless traffic of horsecars, drays, and carriages, exhibited indifference to the nomad who, on a spring day, landed at a West Side dock to seek his fortune.

He might look like a country boy still, but there were probably not ten persons in American who knew the tricks he had with currents, relays, and resistances. He was, so to speak, full of his genius. That morning he was also as hungry as he had

ever been in his life and had nothing with which to buy his breakfast. He set off on a long walk uptown to find one of his friends of former days who might lend him a small sum of money or even allow him to sleep on the floor of his room, until he found a job. But the only friend he had in New York was not at home, and on his first day there he had to "walk the streets a whole night long."

THREE

Pluck-and-Luck Edison

By now Edison was not unused to being down on his luck. But the adventures that befell the emaciated young inventor shortly after he arrived in the great city unnoticed and unwelcome led to an extreme change in his fortunes.

After much walking about New York he found a telegrapher he knew, but was able to borrow only one dollar of him. One of his next calls was on Franklin L. Pope, electrical engineer and telegraph expert, who was then employed at the headquarters of the Gold Indicator Company, on Broad Street. Pope already knew of Edison, as one who had made a stock ticker of his own in Boston.

Talking with the young stranger, Pope could not but appreciate his mettle. He invited Edison to make headquarters in his, Pope's, office and to work at his experiments in the machine shop of the Gold Indicator Company. While waiting for a job to turn up, Edison could study the mechanism of the Laws central transmitter, which was under Pope's superintendence and was still undergoing improvements.

For several nights, at Pope's kind suggestion, Edison even slept on a cot in the Gold Indicator's battery room, living frugally on five-cent meals of apple dumplings and coffee, while above his head millions of dollars were swiftly changing hands. Meanwhile, during the daytime, Edison inspected and familiar-

ized himself with the Laws gold indicator. During the postwar boom when gold speculation reached its peak, this ponderous piece of telegraphic clockworks had assumed immense importance, having almost completely displaced messenger boys or runners as the prime instrument for distributing financial intelligence.

Edison was examining the mechanism of the indicator one day, when suddenly the whole central transmitting instrument came to a stop with a great crash. Pope was on hand and quickly went to work to find out the cause of stoppage. But in the excitement of the moment, he could detect nothing wrong. Dr. Laws himself came rushing forth from his office to learn what the trouble was, and, being even more agitated than Pope, was no more helpful.

Meanwhile, it was as if the heart of Wall Street had suddenly stopped beating. Laws's clients, finding the dial instruments in their offices had halted, grew frantic and sent messenger boys to bring back reports of market quotations. Within a few minutes a mob of three hundred messengers were trying to fight their way into the Gold Indicator Company's office. Franklin Pope, in the melee, seemed to forget everything he knew. Dr. Laws lost his head and began to yell at everyone. A business he had struggled to build up during four years, one which now had attained an annual revenue of $300,000, was threatened with immediate and total ruin.

Edison, in the meantime, had been quietly engaged in looking over the machine himself and soon ascertained the cause of the trouble. He went up to Pope and Laws, who seemed to be holding a shouting match, and managed to convey to them his belief that he had spotted the trouble. One of the many contact springs had broken off and dropped between two gear wheels, stopping the whole mechanism, he said.

"Fix it! Fix it! Be quick, for God's sake!" Laws yelled at him.

The young stranger then carefully removed the broken contact spring, and proceeded to reset the dial back to zero; linemen, in the meantime, set their receiving instruments in unison

with the central transmitter. Within two hours Gold Indicator's quotations were being ground out again and communicated all over the Street.

Dr. Laws, having become much more composed, inquired about Edison, learned that he was out of work, and invited the youth to see him at his private office the next morning. The upshot was that Dr. Laws offered to engage him at once, at a larger salary than he had ever received, to work over the mechanical maintenance of his plant, assisting Pope. Though feeling "rather paralyzed," as he put it, Edison maintained his aplomb. Yesterday he was starving; today he was comparatively rich.

A fruitful and prosperous period had opened for Edison. In July, Pope, who had befriended him, resigned from his position to go into business on his own as a consulting electrical engineer, and Edison took his place. His earnings were now advanced to three hundred dollars a month, a princely salary!

Throughout that summer he worked on improvements in the gold indicator, incorporating in its mechanism an alphabetical wheel and printing device. Gold Indicator could now offer a full stock-quotation service, such as its competitor, Gold & Stock Telegraph, already boasted. That rival company had been bought out by the all-powerful Western Union, the "octopus" of telegraph companies. Rather than contend against Western Union, Laws wisely chose to accept an offer of consolidation and retired from the field with an independent fortune.

Edison had fulfilled his assignment so well that he seemed to have worked himself out of a job. But he had other ideas; indeed he was on the verge of establishing himself on his own as a free-lance inventor.

On October 1, 1869, *The Telegrapher* displayed a half-page advertisement announcing the formation of the new firm of Pope, Edison & Company as "electrical engineers" and "constructors of various types of electrical devices and apparatus." This is believed to have been the first announcement of a professional electrical-engineering service in the United States, the idea of it being credited jointly to Pope and Edison. The two

men also had a sleeping partner, J. L. Ashley, publisher of *The Telegrapher,* who donated his journal's advertising space to the enterprise, in lieu of cash.

In the interests of economy, it was arranged that Edison should board with his friend Pope at the latter's home in Elizabeth, New Jersey. Part of an old shop was rented in Jersey City, near the yards of the Pennsylvania Railroad, in which Edison was to carry on experimental work. He would rise at six, have breakfast, catch the seven-o'clock train to Jersey City, and stay at his work until nearly one in the morning, when he would take a train back to Elizabeth. This iron regime was maintained all that winter; there was the half-mile walk from the station at Elizabeth to Pope's house, and Edison later remembered being nearly frozen on his early morning and nightly walks in the winter of 1870. What did it matter if it was cold? He was doing the things he had longed to do.

Edison completed work on a new type of "gold printer" which was to be made by Pope, Edison & Company and rented to subscribers, who were mostly importers and currency dealers. The rental price, set at twenty-five dollars a week, moreover, was low and offered competition to similar services of Western Union. As so often happened in such cases, Western Union took steps to eliminate this competitive threat by buying up the new service within six months. Pope, Edison & Company realized fifteen thousand dollars by this transaction, Edison receiving five thousand as his share.

He was already flourishing in his trade of inventor, but this was the first large sum he had realized from such work. He had recently begun to send money to provide for his parents.

In the year that followed his arrival in New York, he took out seven patents covering a whole series of refinements in the telegraphic art. The telegraph was Thomas A. Edison's first great love, the primary invention out of which many other innovations were to flow. Although these early inventions were of minor importance they showed distinctive skills and insights.

He could see that even his invention of small parts or refinements for so "commercial" a machine as the printing telegraph possessed a considerable value. What galled Edison, however, was that while he did almost all the work, his two partners got the lion's share, the silent partner Ashley receiving as much as Edison, though he had invested no capital. In the summer of 1870, Edison therefore terminated his partnership agreement with the other two men, in friendly fashion. "I got tired," he said dryly, "of doing all the work with compensation narrowed down to the point of extinguishment by the superior business abilities of my partners."

His real "market," after all, was the giant Western Union Telegraph Company, or its subsidiary, Gold & Stock Telegraph, headed by General Marshall Lefferts, a former Army telegrapher who was one of the best informed of the Western Union executives. By 1870 it was noteworthy that Western Union employed a whole team of inventors. Now Lefferts decided to bring Edison, the youngest of the new crop of inventors, into the company's stable.

For Lefferts had been observing that Edison showed a real expertise. This smooth-shaven youth with the big head and broad brows might look like a rustic or a plain mechanic, but one could feel the cunning behind his devices. In order to reserve Edison's entire services for his company, Lefferts now offered to advance him money at regular intervals for the cost of all research and experimentation on their assignments. Edison accepted the proposal.

One of the worst "bugs" that troubled the early wire printing services was their way of suddenly "running wild" and printing crazy figures. After Edison had turned in a whole series of minor inventions to Western Union, he was asked to work on the improvement of their Callahan stock printer, which also occasionally ran wild.

Within about three weeks he was back in Lefferts's office, and before a group of the company's directors he gave a demon-

stration of a successful unison-stop device that promptly brought stock tickers in outside brokers' offices into alignment with the central station transmitter, whenever they began to print wild figures.

The device made a profound impression on the capitalists; it was obvious it would save much labor and trouble. Even Callahan, whose machine Edison thus completed, said afterward in somewhat grudging praise that a ticker without the unison device would be impracticable and unsalable. At this stage of affairs money had been owing to Edison for some time on account of a whole series of telegraphic inventions.

"Well, young man"—thus Lefferts addressed him—"the committee would like to settle up the account. . . . How much do you think they are worth?"

Edison remembered afterward that he was uncertain about what to demand. He had thought to ask five thousand dollars, but might manage with three thousand. "General, suppose you make me an offer," he said at length.

Lefferts then said, "How would forty thousand dollars strike you?"

Feeling "as near fainting as I ever got," Edison managed to stammer that the offer seemed fair enough. He was asked to come back in three days, when a contract would be ready, and the money also.

The contract, when presented to him, seemed as "obscure as Choctaw," and he signed without reading it. A check with his name on it was handed to him, the first he had ever held. When he went to a Wall Street bank the money was duly paid, in a big pile of ten- and twenty-dollar bills about a foot in thickness.

According to his own account, on receiving his precious bundle of greenbacks he drew his big loose overcoat about him and departed by ferry and train for Newark, where he was living at the time in a dingy boardinghouse. There he sat up all night, unable to sleep for fear of being murdered for the sake of his great hoard.

In the morning he returned to New York to inquire about some way of disposing of his heavy encumbrance of legal ten-

der. Friends advised him to go back to the same bank and open a deposit account; which he did, receiving a little book testifying to the transaction.

Oh, the paradoxes and mysteries of money? Greenbacks now seemed to be raining down from heaven upon the same unwitting head that, only yesterday, did not know where to lay itself.

In the winter of 1871 Edison wandered about the industrial section of Newark looking for a good location for the manufacturing shop he was to establish. He had received from Western Union orders for 1,200 stock tickers, to be manufactured over a period of several years—orders totaling nearly half a million dollars. After climbing many stairs in dingy buildings, he found what he wanted, at his price, on the top floor of a three-story structure at 4-6 Ward Street. Soon horse-drawn vans arrived with a quantity of machinery had had purchased.

Many mechanics came to Ward Street in response to advertisements he had inserted in the newspapers. To their surprise they found the proprietor to be a young man of only twenty-four. In this district of small shops, it was rumored that he had struck it rich.

Within thirty days he had spent virtually all the fortune he had just won for equipment of all sorts. His mood, nevertheless, was of the highest optimism, as shown by one letter to his parents in that winter of 1871, in which he wrote:

> . . . I have a large amount of business to attend to. I have one shop which employs 18 men and am fitting up another which will employ over 150 men. I am now what "you" Democrats call a "Bloated Eastern Manufacturer."

But his great anxiety was on the score of his mother, reports of whose ill health reached him. He had not been home in three years and did not know when he would find time for a visit. Indeed, he longed to see his mother once more and show her that her hopes in him had not been misplaced. But that winter

he was unable to go to her, and after that it was too late. On April 11, 1871, a telegram arrived from Port Huron telling him that Nancy Edison had died two days before. He hurried home to Michigan to attend her funeral, and kneel beside her grave in the cemetery by Lake St. Clair; then he returned quickly to Newark to lose himself in work.

Later he learned that a few weeks after his mother's death, his father, aged sixty-seven, had formed a connection with one of the local dairymaids, aged seventeen, whom he was eventually to marry.

In its heyday, the great Western Union was an outstanding example of the marriage of capital and applied science; it was indeed the principal initiator of the new electrical industry in this country. Western Union's directors distinguished themselves in the two decades following the Civil War by subsidizing scientific invention more actively than did any other industrialists. The company encouraged inventors by paying them; but while thus sponsoring their work it also took control of their products. The valuable patents of Edison, as of other men, became the property of the giant telegraph company. And when Edison went off to Newark to manufacture stock printers for the company, Marshall Lefferts saw to it that the young man took as his partner one William Unger, said to have been Lefferts's business associate. The firm name was, therefore, Edison & Unger.

Now began an intensively active and happy period of Edison's life, during which he developed, from a sort of master technician whose task was to perform—often by simplifying—the crude inventions of others, into an original creator with a flair for truly strategic inventions. At Edison & Unger's he began assembling about fifty men to turn out stock tickers. In hiring workers Edison looked for skilled craftsmen, advertising especially for men who had "light fingers."

There was, for example, John Ott, a youth of twenty-one whom he had first engaged as an assistant at the smaller Pope, Edison & Company shop in Jersey City. A more remarkable mechanic still was Charles Batchelor, a black-bearded young

Englishman who had been sent to the United States to install special machinery at the Clark Sewing Thread Mills in Newark. Another hardworking and well-loved member of the original force was John Kruesi, a Swiss clockmaker, who could construct almost any form of instrument or machine he might be called upon to make. Then there was Sigmund Bergmann, a German, who could then scarcely speak English but who showed himself a keen and diligent mechanic.

These skilled men made up the core of the original crew who learned to manufacture electrical equipment under Edison, who was himself still in the learning stage. He was only twenty-four, younger than most of his men, yet he directed his people and assumed complete responsibility for everything going on in his plant. For Edison by now had a sense of the uniqueness of his inventive talent. As master in his own shop, he showed an irrepressible enthusiasm, like that of a child, and his endless curiosity about everything intrigued his co-workers. He was decidedly the egoist, but one who knew how to ally the devotion of other men with his ego drives, for he had an intuitive knowledge of human psychology.

When undertakings of unusual moment absorbed him, he would go about his shop "laying bets with the men" or offering them prizes to continue their work without stopping until some experimental model he had assigned was brought to working order. When the results of some prolonged period of labor were unusually pleasing to him, he might declare a holiday and invite all hands to go fishing with him.

He could be the complete eccentric, too, in his business methods. "I kept only payroll accounts. I kept no books. I preserved a record of my own expenditures on one hook, and the bills on another hook, and generally gave notes in payment. The first intimation that a note was due was the protest; after that I had to hustle around and raise the money. This saved the humbuggery of bookkeeping, which I never understood."

Only a few months after he had organized the shop at Ward Street, Edison set aside a room on the top floor as his labora-

tory, with far more elaborate equipment than he had ever possessed before. During much of the day he might be busy as a manufacturer, yet he could not give up the habit of experimental investigation. Curiosity drove him to research. At Newark, where he was his own master, experimentation became a daily and systematic, rather than intermittent, pursuit. From the summer of 1871 he began to keep a laboratory notebook, setting down almost day by day the exact record of his investigations, ideas, and even random reflections.

In his Newark years Edison gradually developed into one of the most accomplished technicians of the telegraph industry. The Edison Universal stock printer, improved by him over a period of several years, came into use in almost all financial offices and security exchanges in Europe as well as in America, speeding up the process of all speculation and investment.

His growing professional repute brought many an important entrepreneur to his shop. Not long after he had begun making stock printers, a young railroad and telegraph engineer named Edward H. Johnson turned up at the Ward Street shop bringing with him a model of a new type of automatic telegraph—invented by one George D. Little—which Edison was asked to examine and test. Little's device used a moving paper tape with perforations, corresponding to Morse dots and dashes, which controlled signals sent by a transmitting instrument and printed automatically by the receiver on another tape.

Edison tested the machine thoroughly over wires of the Pennsylvania Railroad and diagnosed its weaknesses. Instead of being faster than the ordinary Morse manual sender, it proved to be extremely "sluggish" because it was highly subject to electrostatic interference. Then Edison, after some study, made a number of proposals for correcting the defects of this apparatus. The mechanism, in his judgment, had splendid possibilities, and he appeared to Johnson both confident and very clearheaded in his plans for its "cure."

The group that had purchased Little's patent had already formed a stock corporation named the Automatic Telegraph

Company to promote the invention. They had been on the verge of abandoning the whole project when Johnson delivered an ecstatic report on the young Newark inventor's plans for making their machine practical. Whereupon the company's directors hurried over to see Edison and entered into a contractual agreement with him. One of the directors of Automatic Telegraph was George Harrington, who, unknown to Edison, was reputed to be the financial agent of the sinister Jay Gould.

Harrington, on behalf of the Automatic Telegraph Company, advanced Edison forty thousand dollars. Edison thereupon, in partnership with Joseph T. Murray of Newark (as Edison & Murray), opened another shop, spent most of the money on special equipment and material, hired more men, and set to work. One stipulation was that Edward H. Johnson be assigned to assist him. Johnson, who had come only to consult Thomas A. Edison, would remain to work as his associate for more than twenty years.

A great part of the autumn of 1871 was devoted by Edison to the automatic, or high-speed, telegraph. In tests carried out during the winter of 1871–72 over lines between New York and Philadelphia, he was eventually able to transmit one thousand words a minute in Morse signals.

On August 16, 1872, a patent application covering his own improvements and additions to the Little apparatus was filed and assigned to George Harrington.

It was Edison's most skillful performance so far and clearly foreshadowed the early development of a commercially practicable automatic telegraph of tremendous speed. Yet he was not satisfied. A big idea had come to him, and he must work it out at all costs. Since no human being could receive the messages coming at such speed over the lines, why not make the receiving instrument entirely automatic? Why send messages by an automatic transmitter in dots and dashes when they might be printed out at the other end of the line in Roman characters by combining the automatic telegraph with the mechanism of his own Universal stock printer?

He pushed on with his work, commenting on each experimental trial with notes such as:

> A bully experiment by T. A. Edison, assisted by Charles Batchelor. . . . The sentence we took: "Now is the winter of our discontent"—with this we got 250 words per minute, but counting five letters to a word we got 228.

By the winter of 1873 the Automatic Telegraph people had reason to be jubilant over Edison's progress. He had performed more than he had promised. The completed models incorporated receiving instruments that printed letters on tape, and, before he finished, he gave the new system tests over long lines for 120 successive nights.

The messages were usually dispatched by Edison from a loft on lower Broadway, in New York, to Washington. On a number of occasions he delivered his automatically transmitted messages as far as Charleston, South Carolina, something of a feat in those days of poor wire.

Edison was given orders to start manufacturing the automatic apparatus, and an economic revolution of some sort impended for the telegraph industry. It was at this point that the mysterious Jay Gould, already known as "the destroying angel of Wall Street," stepped from behind the scenes and took over the ownership of the Automatic Telegraph Company, together with its new telegraphic patents that now promised such remarkable achievements.

By reimbursing Harrington, the principal stockholder of Automatic Telegraph, for his payments to Edison, and by ultimately acquiring that company, Jay Gould also acquired the services of Thomas A. Edison and rights to his automatic patents, a powerful pawn in the campaign for the conquest of the nation's telegraph system. Of all this grand design the exalted young inventor probably knew less than anyone else.

By 1871, when Edison had first appeared in Newark, the former tramp telegrapher certainly seemed to have come up in

the world. But there were arrears in terms of private life of which he was increasingly aware. Prosperous though he was, he still lived in a furnished room in Newark; he had neither a home of his own nor a wife. It was said of him in those days that he was "timid in the presence of women"—but clearly not through lack of interest in them.

Science, alone, had been his chosen mistress for long years. But now he found himself exposed to the electromagnetic effects of daily contact with a beautiful young girl who worked in his shop. She was one of a number of women engaged in punching perforations into telegraph tape; but Edison did not look at the others. Her name was Mary Stilwell and she was then barely sixteen years of age; but she was tall and full of figure, and had a great pompadour of lovely golden hair. More and more often, his mind was distracted from his experiments by the person of Mary Stilwell.

His courtship was conducted in his own odd way and with his own "characteristic humor." Though he had scarcely ever spoken to her before, one day he gave her a sudden smile and inquired rather abruptly, "What do you think of me, little girl, do you like me?"

"Why, Mr. Edison, you frighten me. That is—I—"

"Don't be in a hurry about telling me. It doesn't matter much, unless you would like to marry me."

The young girl was both frightened and disposed to laugh at the same time. But Edison went on impetuously, "Oh I mean it. . . . Think it over, talk to your mother about it and let me know as soon as convenient; Tuesday, say. Next week, Tuesday, I mean."

Soon Edison and his new partner Joseph T. Murray were seen riding out in a carriage to call on Mary and her sister, Alice Stilwell, at the Sunday school where they taught—though the inventor cared nothing for church. When he duly asked her father for her hand, Edison was told that he would have to wait about a year because of her extreme youth.

They did not wait out the year, but within a few weeks, on Christmas Day of 1871, they were married at a small family cer-

emony in Newark. After the wedding lunch Edison brought his bride to the private house at Wright Street, Newark, which he had bought a few days before their marriage.

They were no sooner alone together than some defective stock tickers began preying on his mind. He related that "Just about an hour after the marriage ceremony had been performed," he could think only of those stock tickers! "I told my wife about them and said I would like to go down to the factory. She agreed at once. . . ."

The more famous legends about this incident suggest that he stayed on at his laboratory throughout the afternoon of his wedding and far into the night, while his young bride, frightened and tearful, waited alone in her strange new quarters. It was twelve when a friend rushed into the laboratory, exclaiming, "Tom, what are you doing at this late hour?"

"What time is it?" Edison asked vaguely.

"Midnight!"

"Midnight," he said in a dreamy way. "Is that so? I must go home then, I was married today." And with that he seized his hat and went off.

The next day the couple left for Niagara Falls. It seemed that Mary felt so young and inexperienced that she insisted that her elder sister Alice accompany her on her honeymoon trip.

Their first child, born a year later, was fair and blue-eyed, and was named Marion, after Edison's eldest sister. The next child, Thomas junior, arrived in 1876. In 1878 a second son was born who was given the name of William Leslie.

For a brief season, a measure of order and comfort were brought into the inventor's private life. On Sundays he usually managed to rest and often played with the children, becoming wildly gay. But as often as not his mind would be completely separated from his charming wife and his infant children.

He often returned home from work late for supper and, when his work was very pressing, not until the early hours of the morning. Sometimes he would be away two or three days, sleeping on a bench or cot in his laboratory. Then he would ap-

pear at last, disheveled, pale, and too utterly worn to speak; and soiled as he was, he would throw himself upon a couch or bed in all his clothes.

Mary Edison was scarcely the woman who might have "improved" him. A gentle and affectionate being, she found herself wedded to a "great man" such as she had never imagined. He was older than she by almost ten years, strong-willed, and often transported by ideas she could never understand. She never required that he alter his way of life to conform with the needs of domesticity, but submitted entirely to his wishes.

For Thomas Alva there were no hobbies nor recreations. On the many nights when her husband was away Mary Edison had only the company of a few women friends and her sister Alice, who lived with the Edisons for several years prior to her own marriage. In this family the rule was that "father's work always came first."

In the early months of marriage the enraptured young inventor no doubt made some attempts to explain to his young wife something of what he was doing and what he aspired to do. But he must have found soon enough that he could not draw her attention to his problems. In his laboratory, in the early days, he often thought of her in moments of reverie, and as he worked with his notebooks before him, sometimes scribbled affectionate nicknames for her.

In 1873 America was on the threshold of an era of unrivaled material progress. The resourcefulness of her engineers and inventors was to be displayed only three years later at the great Centennial Exposition in Philadelphia. Here were giant steam engines, two crude examples of the electric arc light, George Westinghouse's air brake for railway trains, automatic printing and multiplex telegraphs by Edison, new gas stoves, fifty-ton locomotives, and new devices for cultivating the land, mining the earth, and making shoes.

The country, nevertheless, was in dire straits in 1873; neither its natural riches nor the industry of its population spared it the "hard times" which periodically recurred. At such periods capital

disappeared, and not even the strongest of financiers seemed to have enough money to invest in the discoveries of inventors.

Edison at this time was on the verge of disaster. It was always difficult for him to manage the exact costing of new products, partly because of his peculiar ideas of bookkeeping. Nor did he easily brook criticism or interference by partners and associates, often becoming suspicious and angry.

One of a series of minor inventions with which he strove to keep himself afloat was a call-box system. Such devices gained a passing popularity because they seemed to offer protection against fire, burglary, and sudden illness. Another minor invention of 1874 was the Edison electric pen, operated by a small electric motor. As he described it in his patent application it "rapidly punctured a sheet of paper with numerous small holes, filling such holes with an ink, and pressing this upon the surface to be printed . . . against a steel plate." The advantage was that after letters or records had been thus written in perforations, many copies could be made. In the days before the typewriter came into commercial use, the electric pen achieved a considerable popularity.

Edison also relates that "toward the latter part of 1875 I invented a device for multiplying copies of letters called the Mimeograph." It was a simple machine for automatic stencil duplication, and he later sold it for a modest sum to A. B. Dick, of Chicago. Out of it grew one of America's largest office-equipment industries.

He was, above all, prolific. In the seven years after he came to New York he applied for and was awarded two hundred patents. But while small sums ventured by businessmen helped him in the initial development stages, there were usually long delays before profits were realized from these minor inventions.

Though the times were bad, his heart was set on a truly big invention, that of a multiplex telegraph that would surpass all that had been done before in this field. The Morse circuit was still essentially a single-track affair operating at the speed of manual sending; but traffic swelled year by year, and it was dif-

ficult to keep pace with it. Therefore, Edison, throughout this period, thought only of realizing the full technical potential of the telegraph. What was galling to him, and would, in the end, drive him from the field, even though the telegraph was his first love, was the scientific and financial conservatism of those who had come to control the telegraph industry.

Early in 1873 Edison had written to William Orton, the president of Western Union, to suggest that the company back his experiments in duplex telegraphy. Orton thereupon invited him to come to his office to see what he could do to improve on J. B. Stearns's duplex devices. The company had bought patent rights to the Stearns apparatus in 1872; though workable, it had not turned out to be a profitable affair. Stearns's device could send two messages on one wire only *in opposite directions.* Orton agreed that if Edison's duplex invention-in-progress could send two messages *in the same direction* and thus double traffic, it would be a vast improvement over Stearns's device.

Edison then asked that he be allowed to use the facilities of the Western Union headquarters so that he could make experiments over their wires. This was agreed upon, with the understanding that inventions developed from these experiments be sold by Edison to Western Union.

All the winter and spring of 1873 the young inventor worked like a madman at a whole series of duplex devices in a large room in the basement of the Western Union building, often staying there all through the night when the wires were free. After two months Edison announced promising results:

> I experimented 22 nights—tried 23 duplex systems, 9 failures, 4 partial success, 10 all right, 1 or 2 bad. . . .

At some time during the series of 1873 experiments, the idea came up that "if he succeeded in sending two messages in one direction, why would it not be as easy to duplex both transmitters as it would be to duplex one? And then there would be four?" Edison expressed the opinion that if one could be done the other could be done. Thus the real possibility of the

quadruplex, which he had outlined for himself in earlier years, arose again and fairly haunted him.

In the spring of 1873 Edison interrupted his experiments on the "diplex," as he called it, to make his first trip to England, in an attempt to sell patent rights to the British for his other important invention, the automatic printing telegraph.

On his return he found the Panic of 1873 on, the sheriff after him, and no money in sight. When he tried to resume his series of experiments on the diplex telegraph at the Western Union headquarters, he could not find Orton—for he was away on a long business trip—and could not interest any of the other executives in his experiments. Western Union itself was having financial troubles; its stock was being pounded down in the market. For the time being the Western Union people seemed to have lost all interest in putting money into new inventions.

Thus a good many months passed during which the tantalizing problems of the diplex and quadruplex were allowed to rest. But they continued to obsess him. He wrote to Orton complaining that he had received no further cooperation from Western Union officials when he tried to renew these experiments in multiplex telegraphy; but he got no reply.

Finding himself in extremities Edison went back to work on other projects for the smaller, rival Automatic Telegraph Company headed by George Harrington and Josiah Reiff. Either he did not know or did not care that these men were really the agents of Jay Gould, the unconscionable war lord of American finance; nor did Edison then suspect that, since he was a freelance inventor who alternately did work for both sides, his patents and his contracts would become central points of dispute in the "great telegraphic war" that now began between Gould and the Western Union interests and would continue for years.

But at some time in this period, it was later charged, Edison had *also* promised to sell rights to the multiplex telegraph invention to George Harrington. From these tangled business

dealings with two rival interests in the telegraph industry arose the oft-repeated charge that Tom Edison had "harum-scarum notions about is contractual obligations."

When Orton finally reappeared, he gave orders that the fullest cooperation be extended Edison; he also approved of the idea of Western Union's chief engineer, George B. Prescott, becoming Edison's partner—though Prescott was his subordinate and a high officer of Western Union, to whom the invention, if successful, would be sold. The conduct of both Prescott and President Orton, who advised him, reflected the low standard of business ethics during those robber-baron times. Edison's own recollection of the affair bore out this view:

> I wanted to interest the W.U. Telegraph Company [in the quadruplex] with a view to selling it, but was unsuccessful, until I made an arrangement with the Chief Electrician of the Company, so he could be known as joint inventor and receive a portion of the money. At that time I was very short of funds and needed it more than glory. This electrician appeared to want glory more than money, so it was an easy trade. . . .

After the deal with Prescott, experiment on the new type of duplex conceived by Edison went forward more rapidly, at Western Union's expense and with the help of its personnel.

Growing slowly in his own undisciplined way, Edison by now had reached a stage where his mind functioned in scientific work with great clarity as well as ingenuity. He had to use the most elaborate circuits—combining strong and weak currents with rapid changes in the direction of their flow—that were ever attempted in the era before electronic science was born. Yet this complicated scheme of the electrical currents was worked out in Edison's head. "He had really very little power of abstraction and had to be able, above all, to *visualize* things," one of his sons said of him in later years.

By early summer Edison was sending jubilant notes to Orton:

I have struck a new vein. . . . Think 't will be a success.
Two messages can be sent in the same direction.
In opposite directions.
Way stations can work on it. . . .

The design of the quadruplex was now complete. At one of his tests Edison rigged up two rooms constituting the near and far ends of the circuit, with a wire running out to Albany, a hundred and fifty miles distant, connecting them; it worked fairly well.

"Boys, she's a go!" he exclaimed to his assistants. But it was still a new thing and full of "baffling perversity" at times. "It must be used," he said, "to find out where the bugs are."

The turning point had come in the summer of 1874 when Edison got the two messages going in one direction on one wire and combined his own apparatus with the Stearns system, thus transmitting, all together, four messages on one wire (two in each opposite direction) at a rate of 142 telegrams per hour.

Edison, Prescott, and Orton then met at Orton's office, and Edison signed a preliminary agreement dated July 9, 1874, in which he designated Prescott as his "coinventor," the patent for the quadruplex to be filed jointly in their names. If the invention proved on further testing to be successful, Western Union was to buy the patent rights from Edison and Prescott on conditions it usually accorded to inventors, with any disputes over terms to be settled by an outside arbitrator.

Up to this time Edison had still received no payment from Western Union, but all through the summer he continued to work hard over the installation and testing of the new quadruplex apparatus on the company's long lines. At last, preparations were made for a full-dress exhibition before a board meeting of Western Union.

Edison relates:

Under certain conditions of weather one side of the quadruplex would work very shaky, and I had not suc-

> ceeded in ascertaining the cause of the trouble. . . . The day arrived, I had picked the best operators in N.Y. and they were familiar with the apparatus. I arranged that if a storm should occur and the bad side got shaky to do the best they could and draw freely on their imagination. They were sending old messages—about twelve o'clock everything was working fine, but there was a storm somewhere near Albany—Mr. Orton, the president, and Wm. Vanderbilt and other directors came in. I had my heart trying to climb up around my oesophagus. . . . But the operators were stars, they pulled me through. The N.Y. Times came out next day with a full account. . . .

On October 14, 1874, a published report of Western Union showed that the quadruplex device had been in operation over part of its lines, and that results thus far indicated it would double the company's existing facilities and yield economies amounting to many millions.

No wonder the great "barons" would continue for years to contend in court for its possession. It would bring dominance of the industry to whoever owned it.

During the modern era of electronics the telegraph has been all but forgotten. Nonetheless, Edison's quadruplex was a strategic invention in its time and impresses us as the masterwork of his youth. It was surely the most complicated job Edison had done thus far, and therefore marks a decided jump in his own intellectual capacity. Up to now the twenty-seven-year-old inventor had been known to a small circle of clients who appreciated his budding talents. But when reports of his quadruplex were published in newspapers and technical journals in the autumn of 1874, his reputation began to spread among a mainly scientific public abroad as well as at home.

At this stage of his career Edison was prosperous; he suddenly found himself with a modest accumulation of capital, his

debts paid off and some twenty thousand dollars to the good. He was also determined to bring about a sweeping change in his way of life. He must, at all costs, quit "business" and manufacturing and live in some quiet retreat where he could give himself entirely to the vocation he loved—inventive research.

FOUR

Menlo Park

In the early spring of 1876 residents of the tiny hamlet of Menlo Park, New Jersey, saw with some surprise a new and rather oddly shaped building going up in an open pasture on a hill overlooking the main railway line between New York and Philadelphia. It was a plain wooden structure of two stories and rectangular in form. A tall white-haired man with a long nose directed the building operation; he was Sam Edison, the father of the inventor, who had been called from Michigan for this purpose. On weekends a slightly built, negligently dressed young man with a silk hat perched on his big head used to drive out to see how the work was going here.

By the end of May the structure was all but completed; it was a hundred feet in length by thirty in width, with white-painted clapboard sides, tall windows and a porch in front. Surrounding it was a stout picket fence. Before the paint was dry, great horse-drawn trucks thundered up from Newark, bringing equipment—boxes of chemicals, rolls of wire, loads of books, a Brown steam engine, and a gasoline converter that would supply gaslight. Finally the younger Edison came to install himself in the new building; and with him came his faithful retinue, Batchelor, Kruesi, John Ott, and a dozen other manly-looking, full-bearded workers.

In that homely barnlike structure, the inventor partitioned off a small office, a little library, and a drafting room on the

lower floor; the floor above was a single room furnished with many tables covered with instruments, machines, and batteries, the walls being lined with shelves holding a great variety of materials and chemical jars of every color. On this floor there was a force of thirteen skilled mechanics working with fine steel and brass instruments, or electrical products of every kind. At their head, bent over a table, was Edison.

There, in effect, he hung out his shingle, announcing to the world that he, Thomas A. Edison, would undertake research and development work on *any and all inventions.*

It will be recalled that on first coming to New York he had formed the partnership of Pope, Edison & Company, as consultants in electrical engineering, perhaps the first concern of its kind. The establishment at Menlo Park was more ambitious; it was, in fact, the first industrial research laboratory in America, or in the world.

At that time there were only a few poorly equipped laboratories at some of the leading universities, and they were for teaching purposes or for purely scientific research. No one had ever heard of a research center directed solely toward *practical* inventions—an "invention factory" making inventions to order. The traditional view was that invention was an act of God, a "divine accident," a stroke of genius. Here was a genius who held that there was no such thing as genius. And his bustling organization at Menlo Park was, in itself, one of the most remarkable of Edison's many inventions.

He told the physicist Dr. George Beard, in all seriousness, that he proposed to turn out at Menlo Park "a minor invention every ten days and a big thing every six months or so." Beard was dumbfounded and thought Edison was blowing. But the recent list of his patents ran to about forty a year. A number of them, covering the stock printer and quadruplex, had already brought him sizable revenues; there were others under way; and he knew in addition that leading capitalists of New York would seek him out, if only for the purpose of hiring him to test, improve, or perfect someone else's invention.

He was truly happy, he felt a blessed sense of freedom, when at last he found himself in the country in the month of June; and in this spirit he wrote to a patent lawyer of his acquaintance about his "brand-new laboratory . . . at Menlo Park, Western Div., Globe, Planet Earth, Middlesex Country, four miles from Rahway, the prettiest spot in New Jersey, on the Penna. Railway, on a High Hill. Will show you around, go strawberrying."

Edison purchased a plain farmhouse of six rooms, hard by the site of his laboratory, and installed Mary there with his two children. Two of the other six houses in the village were occupied by his principal assistants, Batchelor and Kruesi. who also had families. The one boardinghouse in the place, a Mrs. Jordan's, was soon filled with those laboratory mechanics who were bachelors. In effect, the whole small hamlet became a community devoted to experimental science. Edison Village, it was humorously called.

As at Newark, his men worked long hours, starting with the whistle at seven in the morning, sometimes sleeping on benches or on the floor during all-night vigils. On occasions when they worked late at night, a pleasant midnight collation was sent in by Mrs. Edison, and they would make merry, the place resounding with laughter.

Not only did Edison exert a powerful attraction upon his co-workers, but the ambitious program of the next five years gripped their imagination more and more. Young workers, hearing of the remarkable deeds performed in this place under the leadership of the young inventor, eagerly came to apply for jobs.

The significance of the Menlo Park laboratory was that its master worked with a whole team, comprising not only machinists and technical men but also several persons with formal scientific training. He still adhered to his cut-and-try methods. But at Menlo Park, industrial invention depended not on the insights of the shopworker alone, but on a careful comprehensive search by a whole team under him. It is for this reason that his

little organization served as a pilot model for the huge industrial research laboratories organized in later years, such as those of the Bell system and General Electric.

Edison's decision not to undertake inventions unless there was a definite market demand for them was of great historical importance, as a modern commentator, James G. Crowther, has written: "He was the first great scientific inventor who clearly conceived of invention as subordinate to commerce." In thus making his inventions conform to the necessities of human use and convenience, he also established a social and democratic criterion for applied science. "He began the advance toward a democratic theory in which invention would be cultivated in order to increase human happiness. . . ."

In choosing the "commercial" standard, Edison was by no means being "vulgar" or mercenary. He was determined to make his hazardous profession both businesslike and respectable. But no one was more satisfied than he, once there was a little money on hand, to make that little do for his needs and to live for the joy of inventive work.

Ever since July of 1875, some months before his Menlo Park move, a wholly new field of investigation had absorbed Edison: that of the acoustic, or harmonic telegraph, which by use of tuning forks or reeds transmitted musical notes over a wire. By 1875 Elisha Gray had contrived a telegraph that carried nine to sixteen different musical notes, taken from tuning forks and transmitted to a receiving instrument. But if different musical notes could be sent over an electric wire, why not the sound of the human voice—why not a *speaking* telegraph? Gray, in fact, called his harmonic telegraph a "telephone."

In the meantime Alexander Graham Bell, a well-educated Scottish immigrant who was Edison's age, had the same idea, and for several years struggled with the problem of making a metal disk, vibrating in response to sounds, convey and reproduce those sounds over an electrified wire.

By the summer of 1875 William Orton seems to have been alerted to the promise of the experiments being pursued by

Gray, Bell, and others. Swallowing any hard feelings engendered by the bitter legal battle between Western Union and the Gould interests over the patents of that talented young "professional," Edison, he once again called him in. Already it was said of Edison, "He never fails in anything he seriously undertakes." Orton now invited him to investigate acoustic telegraphy for Western Union. Edison went to work, and shortly before moving to Menlo Park he devised in apparatus for analyzing waves produced by various sounds.

Edison was late in entering the race for the telephone: half a dozen expert men had begun the investigation of the speaking telegraph years before him. He also showed great courage in undertaking such work in view of the fact that he was very hard of hearing. Evidently his hearing loss was that of the eardrum and middle ear, for he seemed to be able to hear sound instruments by biting his teeth into them, thus allowing vibrations to be conducted through the bones of his head to the inner hearing nerve.

Alexander Graham Bell, meanwhile, had been making rapid progress. One afternoon in June 1875 his ear had caught a first feeble sound of words, the voice of his assistant speaking to him over the wire of a crude magnetotelephone. This clue was followed up closely until the morning of February 14, 1876, when Bell thought he had invented enough to apply for a patent covering his telephone. That same day, his nearest rival, Elisha Gray, walked into the Patent Office to outline exactly the same invention transmitting human speech. It is probably the most famous example of "parallel" invention made by two men working independently. The patent law, however, accorded the entire authorship and rights over one of the most valuable patents ever granted to Bell alone.

After the details of Bell's telephone were made in public in March 1876, Edison went back and examined his own device for measuring sound waves. He now found that it was capable of transmitting sound, though crudely. If only he had the ears to hear faint sounds of speech, he might have won the race for the telephone. He acknowledged himself fairly beaten.

In July 1876, at the Centennial Exposition in Philadelphia, Bell's demonstrations of his telephone made a tremendous public sensation. Now the Western Union magnates, who only a few months before had turned down Bell's offer to sell his patents at a reasonable price, began to feel uneasy. Again they decided to call in Edison. As he put it simply, they had found the 1876 telephone a crude affair, and "wanted me to make it commercial." It consisted only of two receivers used alternately for hearing and speaking; while one person talked and the other listened. Bell thought it was pretty wonderful when the human voice was carried for a distance of two miles. The man "sending" had to shout each sentence three or four times in order to be heard above a good deal of "interference."

During the autumn of 1876 and the winter following, Edison puzzled over the problem of raising the telephone's volume while still controlling and balancing the current variations it induced. It was at the end of the first winter at Menlo Park that Edison had his big idea. The Bell magnetotelephone, for many reasons, could not be used effectively as both receiver and transmitter. What was needed was a separate transmitter in circuit with Bell's receiver, which when used alone for both purposes was too weak.

Edison then conceived of a second strategic innovation, that of introducing an induction coil so that electrical impulses of an enormously higher potential could be sent out on the main line by the secondary circuit of the coil. Instead of being limited to a few miles' range, the sound vibrations of Edison's transmitter could be heard over long distances.

Now he began a broad search for the right conducting substance for his transmitter. He divided this labor among his staff at Menlo Park and, beginning at the end of his stock of chemicals tried every one of them—some two thousand. If it took all summer, he would continue the search by such methods. And after that, throughout the autumn and the winter.

He was thoroughly familiar with the wonderful properties of carbon. His first rude transmitter used graphite electrodes

and operated fairly well; but now he searched for a purer carbon. One day an assistant brought him a piece of broken glass incrustated with carbon black from a smoking lamp chimney. He scraped off the carbon, pressed it into a little cake and tried that. It was molded in the form of a button and introduced into the transmitter. Now the volume of sound was several times larger than in Bell's telephone and the articulation was sharp. Edison's carbon transmitter was, in fact, a *microphone*.

In a test that was a sort of full-dress rehearsal over a line 107 miles long, between New York and Philadelphia, in the presence of Western Union's directors, Edison's transmitter delivered speech "loudly." The effect was sensational. Everyone present felt that he had liberated the art of telephony—so hoarse and stuttering in its first two years—and had won a tremendous advantage over the limited Bell apparatus. One spoke into the separate Edison transmitter and at the same time also listened, through the receiver held at one's ear, to the speaker at the other end of the line. On that day in 1878 the telephone received its fundamental form, which was to remain virtually unaltered for almost half a century.

Edison now had begun to feel that "he ought to be taken care of . . . and threw out hints of this desire." Orton sent for him and asked him how much he wanted. Edison said he thought $25,000 might have been enough, but invited Orton to make him an offer. Orton thereupon said his company would pay the inventor $100,000, a tiny percentage of the wealth his invention was to bring in. Very well satisfied, Edison agreed on condition that the money be paid him in installments, during the life of that patent, of $6,000 a year for seventeen years. Orton had no trouble agreeing to this, since the interest alone on $100,000, at six percent, would have netted the inventor a similar sum. But to Edison it was just as well, since he believed that "inventors didn't do business by the regular process." He feared that if he received all the money at once, it might disappear quickly.

Meanwhile, the sale of his telephone transmitter patent in England brought further rewards, for there it was seen at once

that Edison had a grip on half the telephone invention. He has related:

> One day I received a cable . . . offering "30,000" for my interest. I cabled back I would accept. When the draft came I was astonished to find it was for 30,000 pounds sterling. I had thought it was dollars.

For "curing" (as Edison phrased it) Bell's magnetotelephone he gathered in altogether a quarter of a million dollars. The telegrapher who had come to New York threadbare ten years earlier was already the highest-paid professional among American inventors, one who, in a pinch, could be trusted to deliver almost any contrivance needed.

The years at Menlo Park, from 1876 to 1881, were by all odds the happiest and most fruitful of Edison's life. He was in his early thirties and at the very height of his creative power. The business of inventing was humming along; the combats of great Wall Street moneymen for possession of his patents testified to their importance to the industrial system.

There was a charm about life in this village of applied science that many who came here noticed. Here Edison enjoyed peace and freedom. He could meditate, permit his mind to wander, even "play" without interruption. "Edison is always absolutely himself," one visitor wrote. When he wished to inform himself on some special subject of moment to him, he would sometimes gather together a great mass of books, lay them out on the floor of his library and "pore over them for hours on end . . . after which he would go back, refreshed, to the manual part of his task."

His life was simple and yet complete. His co-workers were sworn friends and disciples who shared in his devotions. Moreover, his wife and children were close by. The eldest, Marion, as a girl of five or six, often played in the laboratory at her father's feet. On evenings when he returned home early for

supper—rarely enough—he sometimes entertained his family with mechanical or musical toys of his own invention.

In his laboratory he was capable of pursuing a large variety of inventions under development at the same time. At one period, early in the eighties, there were said to have been forty-four of these under way, with different assistants in charge of each. Edison would study their progress daily, passing rapidly from one to another as he inspected them. In 1877, for example, we know that technical improvements were being worked out for various telegraph and submarine-cable devices; different types of telephones were being improvised; electric pens and mimeograph machines were being made; many chemicals and drugs were under investigation; even a crude incandescent lamp was contrived, but was abandoned when it burned out in a few moments.

Edison appears to have sensed clearly the dependence of invention and discovery upon the total accumulation of knowledge. He was forever collecting curious and miscellaneous facts, and squirreling them away in his memory. In his work, to be sure, is all the evidence of methodical and close-gripping deduction.

But he also stressed the important role played by chance or accident in discovery. Pasteur, who had a deep understanding of the mental processes of discovery, said, "Chance favors the mind that is *prepared*." Edison, too, then must certainly have been prepared when, as he confessed, he met, "by the merest accident," with the opportunity for the most original invention he had ever conceived, one that would open up a wholly new and marvelous art to mankind.

The study of sound fascinated Edison—in that he was partially deaf. At this time, he has said, "my mind was filled with theories of sound vibrations and their transmission by diaphragms."

Some time before he had worked out the carbon transmitter he applied for a patent covering "An Improvement in the

Automatic Telegraph," designed to permit the recording and repeating of the telegraph messages at speeds of two hundred words a minute. This device consisted of a disk of paper laid on a revolving platen and rotating around a vertical axis, quite like the modern phonograph disk. An embossing point traveled over the disk embossing on it the dots and dashes of incoming telegraph messages.

Returning later to this telegraph repeater, he tried to improve its performance by changing over to an arrangement using continuous rolls of coated or paraffined paper tape. When this instrument raced along at high speed, the indentations of dots and dashes striking against the end of a spring sometimes gave off a noise, "a light musical, rhythmical sound, resembling human talk heard indistinctly."

The indistinct mutterings in the machine haunted him; the sounds it made were *almost human,* like those issuing from the first weak Bell telephones.

It *may* have been accident that caused the musical sound in the telegraph repeating instrument. But diaphragms were very much in his mind now. One day he took a tape of paraffined paper and placed it underneath a diaphragm having a small blunt pin attached to its center. As he related:

> I rigged up an instrument hastily and pulled a strip of paper through it, at the same time shouting "Halloo!" Then the paper was pulled through again so that its marks actuated the point of another diaphragm, my friend Batchelor and I listening breathlessly. We heard a distinct sound, which a strong imagination might have translated into the original "Halloo." That was enough to lead me to further experiment.

They had heard the first strangled cries of the infant talking machine struggling to be born.

This work was kept somewhat secret. There is evidence that he approached the Western Union people with his idea of re-

producing and recording the human voice, but they saw no conceivable use for it!

It is under the date of August 12, 1877, that we first come upon an entry in Edison's notebooks using the word "phonograph"; and by early November there were indications of the pristine form of the talking machine:

> I propose having a cylinder . . . 10 threads or embossing grooves to the inch . . . cylinder I foot long.
> I have tried wax, chalk, etc.

A fortnight later the first accurate sketch in his own hand of the original talking machine is entered into the notebooks. He recalled incidents accompanying it with great vividness:

> Instead of using a disc I designed a little machine using a cylinder provided with grooves around the surface. Over this was to be placed tinfoil, which easily received and recorded the movements of the diaphragm. A sketch was made. . . . The workman who got the sketch was John Kruesi. I didn't have much faith that it would work. . . . When he was nearly finished, [he] asked what it was for. I told him . . . He thought it absurd.

Others present bet the "Old Man" cigars that the contraption would not work. When the thing was completed, it was a solid job of brass and iron, with a three-and-a-half-inch cylinder on a foot-long shaft and a hand crank to turn it. Edison fixed a sheet of tinfoil around the cylinder, began turning the handle on the shaft, and shouted into one of the little diaphragms:

> Mary had a little lamb,
> Its fleece was white as snow,
> And everywhere that Mary went
> The lamb was sure to go.

Then he turned the shaft backward to the starting point, drew away the first diaphragm tube, adjusted the other in position to reproduce sound, and once more tuned the shaft handle forward. Out of the machine came forth what everyone recognized as the high-pitched voice of Thomas A. Edison himself, "almost perfectly" reproduced, reciting the little Mother Goose rhyme. Kruesi turned pale and made some pious exclamation in German. All the onlookers were dumbfounded.

Edison declared afterward, "I was never so taken aback in all my life. Everybody was astonished. I was always afraid of things that worked the first time." After that, he tells us, they sat up all night fixing and adjusting it so as to get better and better results—talking into it and singing, testing different voices, then listening with unending amazement to the words coming back.

When, on December 15, 1877, he filed a patent for the phonograph, his most original invention, nothing remotely resembling such a machine was ever found to have been mentioned in all the voluminous records of the United States Patent Office, and the grant of patent was made in the unusually brief time of fifty-seven days.

When he had finished with his invention, Edison hardly knew what to do with it. These days his inventions were usually made on order; but no one had ordered this. Was it only a scientific toy, a curiosity? Yet the first raucous croaks of Edison's phonograph were heard round the world. People did not yet understand the 1876 telephone; now they were confronted with the phonograph, which seemed even more astounding.

Fame entered the door of the Menlo Park laboratory at the end of 1877. The acclaim suddenly given the phonograph and its author was almost unprecedented. A "phonograph craze" flared up. Newspaper reporters, writers, and artists of popular magazines flocked out to Menlo Park in large numbers, and described the "nineteenth-century miracle" of the phonograph.

A leading journal in America saluted Edison in an editorial as being conceivably "the greatest inventor of the age," adding:

> We are inclined to regard him as one of the wonders of the world. While Huxley, Tyndall, Spencer and other theorists talk and speculate, he produces accomplished facts, and with his marvelous inventions is pushing the whole world ahead in its march to the highest civilization.

After the press had done its duty in telling the millions about the "speaking phonograph," the crowds who had read about "the New Jersey Columbus" came to Menlo Park to see him and his works. They came from cities and farms, by carriage or wagon and by train; indeed the railroad organized excursions. Menlo Park became the mecca of a continuous pilgrimage of scientists and curiosity hunters.

People crowded into the lower floor of the building and saw nothing but books, blueprints, and mechanical designs; then they tramped upstairs and gaped at the array of chemical jars, metals, batteries, and electrical machines. Overhead were tangled lines of telephone and telegraph wires that made strange cobwebs everywhere.

Edison himself demonstrated his invention and answered all questions promptly and clearly. Like a comedian, he entertained the crowds by showing them all sorts of tricks the talking machine could perform: he whistled popular airs, or he rang bells, coughed, and sneezed before the recording tube, then reproduced these assorted sounds.

Among the visitors were a good number who came to see with their own eyes if there were not some prestidigitator's trick about this new invention. One such was Bishop John Vincent, cofounder of the Chautauqua movement. After looking sharply all about the laboratory for a hidden ventriloquist, the bishop began to shout into the phonograph's recording tube with great rapidity a long string of jawbreaking Old Testament names. When the tinfoil record was played back to him, he announced

emphatically that he was now satisfied there was no fraud by Edison, since not another man in the whole country could recite those biblical names with such speed as he had used.

Nothing would suffice, after all the newspaper stories of Edison's miracle, but that he must come to the nation's capital to exhibit his speaking phonograph before the notables of government and science. He accepted urgent invitations to Washington, and arriving there, first paid a call on Joseph Henry at the Smithsonian Institution. Here he demonstrated the phonograph in the scientist's parlor.

Later in the evening he made his appearance before a large gathering and allowed his machine to introduce itself. As Edison turned the crank its voice was plainly heard saying, "The speaking phonograph has the honor of presenting itself before the American Academy of Sciences."

The last stop during that triumphal tour of the capital was at the White House. As Edison relates:

> About 11 o'clock word was received from the President that he would be very pleased if I would come. . . . I was taken there and found Mr. Hayes and several others waiting. . . . The exhibition continued till about 12:30 a.m., when Mrs. Hayes and several other ladies who had been induced to get up and dress, appeared. I left at 3:30 a.m.

Little known hitherto, except in his profession, the youthful-looking inventor of the phonograph was now seen or talked about everywhere. At first sight the great public took him to its heart as it had never done with other men of science—at least since Ben Franklin's day. Edison was a plain, rough-hewn, democratic type—and yet, as all acknowledged, he certainly "knew his stuff." As he was written about in the press, exaggerated tales were spread of the extreme poverty of his boyhood and youth. Without schooling, without the help of friends or family, the former trainboy was said to have come to New York in his rags and conquered. He was the very type of the self-

made man, whom so many Americans fervently believed in and sought to emulate.

Popular traditions about great inventors have long been woven around old legends of "magicians" endowed with superhuman powers, from the ancient Titans in their caves to the witches and sorcerers of medieval times. The appellation of "Wizard" was now affixed to Edison; henceforth he was to be the Wizard of Menlo Park.

For a season the young inventor seemed never to tire of experimenting with his phonograph. He was quite aware that the tinfoil was not a satisfactory material for recording; that some of the consonants came out "soft" or were wanting altogether; and that rotating the cylinder by hand at an even rate of speed was difficult. As one historian has concluded: "The phonograph, in truth, had been launched before its time. It was all very well to talk about dictating letters . . . or using it to read [books] to the blind, but not when a tin-foil cylinder would play for scarcely more than a minute." The new machine greatly needed development to realize its immense possibilities—which no one foresaw, least of all Edison, who was deaf and unmusical.

For a while, he investigated new substances for recording, such as wax, and a new form of record, shaped like a plate, or disk. But eventually Edison laid the phonograph aside, *abandoned* it for ten long years, leaving all the potential of this highly original device undeveloped. Here was one of the inventor's greatest blunders, one that in the end was to cost him dearly.

Within a year or two the phonograph was regarded only as a scientific curiosity. Edison himself in a newspaper interview described it as "a mere toy, which has no commercial value." Rival inventors, in his judgment, would not even bother to pirate his invention.

He had other ideas that engaged his full attention in the summer of 1878. One undertaking particularly gripped his imagination; it was described by one of his intimates as being

that of dispelling "night with its darkness . . . from the arena of civilization."

In the late spring of 1878 Edison felt very tired and ill. He had been working at the development of a dozen or more inventions at the same time. In seven years, since his brief honeymoon, he had had no real vacation. When an invitation came to him, through Professor George F. Barker, to join an expedition of scientists going to the Rockies to observe the total eclipse of the sun that summer, he gladly agreed to make the trip.

During their journey together, Professor Barker, who had become passionately interested in the possibilities of electric lighting, talked long and earnestly with Edison of recent developments in this field and urged him to investigate it for himself. "Just at that time I wanted to take up something new . . ." Edison recalled.

The problem of turning electric current into illumination had haunted men of science throughout the nineteenth century, ever since Sir Humphry Davy's famous demonstration before the Royal Society of London in 1808, when he ran a strong electric current (furnished by a battery of two thousand cells) through a small gap between two carbon rods, creating a brilliant blue-white light in that gap, in the form of an arc. But for many years after, progress in this field was slow for want of an abundant source of electrical current.

In America, somewhat later, at the Philadelphia exposition of 1876, Moses G. Farmer exhibited three glaring arc lights, burning in the open air, powered by his own rude dynamo. A year later Edison received a report on the new "electric candles" which Paul Jablochkov, a former Russian officer of engineers, had successfully introduced as streetlamps in Paris.

At the time (1877), Edison set to work experimenting with open arc lights having carbon strips as burners. He also investigated incandescent lights. The incandescent light was entirely different from the arc light in principle: it used a slender rod or pencil enclosed in a glass globe from which the oxygen had

been exhausted, more or less. Electric current heated the pencil to incandescence, the absence of oxygen preventing the metallic or carbon rod from burning out or melting. As yet, only poor results had been obtained with incandescent lamps, after fifty years of desultory experimenting. Baffled by the perplexities of the task, Edison had dropped his electric light experiments to devote himself to the phonograph.

On his return from the West at the end of August 1878, he found a file of papers sent him by Grosvenor P. Lowrey, general counsel to Western Union, reporting on the Paris Exposition that summer and especially on the new electric candles of Jablochkov. By now a half mile of the Avenue de l'Opéra had been illuminated by those big arc lights; they were said to have provided the finest artificial light ever seen.

Now Lowrey joined Barker in urging Edison to undertake an investigation of the electric light. Early in September Edison agreed to go with Professor Barker to Ansonia, Connecticut, to visit the brass-manufacturing shops of William Wallace, partner of Moses Farmer and coinventor of the first American electric dynamo. After receiving the inventor and his party warmly, Wallace exhibited eight brilliant arc lights of five hundred candlepower each as well as the Wallace-Farmer dynamo of eight horsepower that supplied them.

As an eyewitness related:

> Edison was enraptured. . . . He fairly gloated. . . . He ran from the instruments to the lights and then again from the lights back to the electric instruments. He sprawled over a table and made all sorts of calculations. . . .

He then turned to Mr. Wallace and said challengingly, "I believe I can beat you making the electric light. I do not think you are working in the right direction." They shook hands in friendly fashion and, with a diamond-pointed stylus, Edison signed his name and the date on the wine goblet served by his host at dinner.

* * *

He had merely played with the idea of making electric lights before this time. Now he was on fire. After examining the Wallace-Farmer arc lights, he relates, "I determined to take up the search again. On my return home I started my usual course of collecting data. . . ." Shortly afterward he said, "I saw *the thing had not gone so far but that I had a chance* . . . what had been done had never been made practically useful. The intense light [of the arc light] had not been subdivided so it could be brought into private houses."

A reporter for one of the leading New York dailies obtained a startling interview with the inventor. With soaring imagination, Edison communicated to the reporter his vision of a central station for electric lighting that he would create, and from which a network of electric wires would extend, delivering current for small household lights. The plans he announced were, in breadth and originality of conception, far in advance of anything earlier attempted in this field. Together with light, he would transmit energy for power and heat, to cook food, to run an elevator, a sewing machine, or anything else requiring a motor.

During the visit with Wallace the image of the central gas-house and its distributing system, of gas mains running to smaller branch pipes and leading into many dwelling places, had flashed into his mind. With the gas system a man could turn a single jet in one room on or off, or do so with a hundred jets. Edison was now aiming to duplicate the gas-distributing industry—with electricity!

"If you can replace gaslights, you can easily make a great fortune," a New York newspaper reporter remarked.

"I don't care so much about making my fortune," Edison replied tartly, "as I do for getting ahead of the other fellows."

There was the man, very much himself. To have more money meant little. But to stand as leader among the world's foremost inventors, to make again and again a great impact on society and industry—even to "change the world," if possible—meant everything.

* * *

There were two main avenues which experimenters seeking to develop the electric light had followed: that leading to the big arc light, and that of the small incandescent unit, the enclosed glow lamp. Though the arc light had recently been brought to the commercial stage, its limitations were many. Arc lights ran as high as three thousand candlepower, but they gave an almost blinding glare, emitted noxious gases, and could only be employed high overhead, in streets or in high-ceilinged factories or shops. Edison, seeing what the adapters of the arc light had not done, struck out for the incandescent light in a vacuum—the will-o'-the-wisp which so many inventors had pursued in vain during a half century.

In making his decision he was going against the stream, and "putting aside the technical advance that had brought the arc light to the commercial stage." For the problems of the incandescent light were entirely different from those of the arc light; it would need a different type of dynamo and a different kind of circuit, not to speak of many new safety devices. Meanwhile it remained for him also to find an incandescing substance that would endure a fierce heat, yet would not fuse or melt and burn out within a few minutes—the very thing that scientists had been seeking for fifty years.

He naturally turned to carbon in his first experiments, since he knew that it had a very high melting point. Strips of carbonized paper were tried as "burners"; they were made incandescent in the open air and quickly oxidized, merely to ascertain how much current was required. Then he used some glass jars, partially evacuated of air by means of a hand-worked pump, and managed to keep his carbon strips incandescent for "about eight minutes" before they went out. Accepting the prevailing view that carbon was easily destructible, he laid it aside for the time being.

He next tested various infusible metals, and out of a whole group chose platinum. On introducing a spiral of platinum wire into a globe partially exhausted of air, he was able to bring it to incandescence and achieve a brilliant light. However, at high heat the platinum burner quickly melted and the light went out.

After that he tried using an iridium-platinum composition for his incandescing substance. These early experimental lamps played exasperating tricks on the inventor, who studied them for long hours, brooding, distracted, letting his cigar go out, lighting it, letting it go out again.

To be sure, he was learning a good deal as he went on. The earliest notes on the electric light experiments show him already keenly aware of the importance of obtaining a higher vacuum, which he achieved by cementing the bottom of his leaky glass container. It was going to be a long, hard job, he realized, requiring added equipment, a larger staff, and a good deal of money.

Grosvenor Lowrey had promised that if Edison undertook to invent a practical electric light he would approach the Western Union directors, who were his clients, for funds to finance Edison's research work. Lowrey, as an informed patent attorney and also a leading New York corporation lawyer, had fallen completely under the spell of the self-taught inventor and regarded him much as an ardent collector of paintings regards a great artist whose works he believes are destined to become immortal. On receiving assurances that Edison would actually undertake the work on the electric light, Lowrey began to form a syndicate of capitalists to back his inventive research. From the start of the lamp experiments, the lawyer went about buttonholing his well-heeled clients, assuring them that "Edison has discovered the means of giving us an electric light suitable for everyday use, at vastly reduced cost as compared with gas."

Edison, meanwhile, encouraged by Lowrey, called in the metropolitan newspaper reporters, and launched a full-scale press campaign designed to loosen Wall Street purse strings. To be sure, the inventor conceded, he needed time, perhaps several months, or a year, to "get the bugs out." Nevertheless he put on a show of his platinum-wire lamp. As a reporter described the scene, he turned on the Wallace-Farmer eight-horsepower dynamo and

> touched the point of a wire on a small piece of metal near the window casing . . . there was a flash of blinding white light. . . . "There is your steam power turned into an electric light," he said. Then the intense brightness disappeared, and the new light came on, cold and beautiful. . . . The strip of platinum that acted as a burner *did not burn*. It . . . glowed with the phosphorescent effulgence of the star Altair. A turn of the screw, and . . . the intense brightness was gone; the platinum shone with a mellow radiance through the small glass globe.

But if the artful Edison had not turned off that screw, the light would have gone out by itself within a few minutes.

Nonetheless, the repute of the Wizard of Menlo Park was so formidable that his published claims created a fair-sized financial panic on both the London and New York stock exchanges. Gaslight securities within a few days lost about twelve percent of their value, "owing to the publication of Professor Edison's discovery of the distribution of electric light," a cabled dispatch from London reported. It was now widely believed that, thanks to Edison's entrance into the field of electric lighting, the whole flourishing gaslight industry might soon enter into a decline.

On October 1 Lowrey wrote Edison that he had approached Hamilton W. Twombly, the son-in-law of W. H. Vanderbilt ("the richest man in America"), and told him that the inventor "was willing to sell half of this invention for $150,000." On the following day Lowrey was closeted for an hour and a half with Twombly and Vanderbilt, and that night he wrote Edison that he hoped to get for him a "clear $100,000" from the Western Union directors. He also solicited the interest of the partners of Drexel, Morgan & Company.

Evidently the sensational stories about Edison's plans helped the Western Union people make up their minds. They had narrowly missed buying the telephone patent of Bell and now could not get it at any price. They would not pass over the

chance of Edison's light. On October 12, 1878, Lowrey was able to report he had a contract ready.

The contract, drawn up by Lowrey between Edison and the syndicate of capitalists who were to finance his researches, was one of the most noteworthy in the annals of American industry. In effect the Western Union people were buying rights, not in an existing invention, but in an unknown quantity, a promise. "Their money," Edison said, "was invested in confidence of my ability to bring it back again." The original investing group, who became directors of the new company, figured prominently in the Social Register and the New York financial district: Vanderbilt, Twombly, President Norvin Green of Western Union, Egisto Fabbri (partner of J. P. Morgan), Lowrey, and also Tracy Edson and James Banker, both important capitalists. Each of these men, under a preliminary agreement, invested a few thousand dollars cash by subscribing altogether to five hundred shares of the proposed company's stock, amounting to $50,000, which was paid over to Edison in installments.

The new company was to be known as the Edison Electric Light Company, and was originally to have 3,000 shares ($300,000 capital stock), of which 2,500 shares were to be given to Edison. For his part, he agreed to assign to the company all his inventions and improvements in the electric lighting field for a five-year period. If Edison's future inventions were successful, his stock would be worth a good deal; if he failed, it would be worthless. All that the backers risked was their original $50,000 cash—in return for which they had the chance of controlling all of Edison's patents in this field and of developing a worldwide patent-holding and licensing company profiting from the inventor's patents in electric lighting. On this occasion they were showing real vision, though at other periods they were by no means consistently cordial to inventive research.

Behind the whole venture stood the figure of J. Pierpont Morgan, already the country's outstanding banker, who kept his name off the board of directors but had his partner Fabbri serving as director and treasurer of the new company. To have gained support for such a novel undertaking from America's

leading financiers was decidedly a feather in the cap for Thomas A. Edison's little all-purpose "invention-factory" at Menlo Park. He was simply given a blanket order to create an electric lighting and distributing system, and to develop a pilot plant, or model, of that system.

As soon as the new project was reported, other inventors, in Europe as well as in America, had become unusually active in this field. But one reason why Edison believed he would "get ahead of the other fellows" was that he had unbounded confidence in his laboratory, his superior scientific equipment, and his staff. All of this was rapidly expanded in 1878 when three sizable buildings were added to the original structure. One was a separate office and library; another, an engine house of brick construction, to contain two eighty-horsepower steam engines; a third was a glassblower's shed.

All that autumn, and through the winter of 1879 that followed, Edison studied the problems of high-resistance lamps and multiple circuits. He must contrive a light with a very high resistance to the current and using, therefore, but small quantities of it. He had known this from the beginning.

The investigation of electric lighting required a most arduous program of research: Edison and his staff made lengthy studies of the electrical resistances of various substances, and examined them for heat radiation. The effect of increasing or lowering resistance, and of changing voltage or amperage on such materials, and of using them in different forms, was also measured carefully.

At an early stage of this campaign, Edison, in a very revealing letter of November 1878, admitted that all sorts of unexpected difficulties were turning up.

> It has been just so in all my inventions. The first step is an intuition—and comes with a burst, *then* difficulties arise.—This things gives out and then that—"Bugs" . . . show themselves and months of anxious watching, study and labor are requisite before commercial suc-

> cess—or failure—is reached . . . I have the right principle and am on the right track, but time, hard work and some good luck are necessary too. . . .

In January 1879 Edison designed and completed his first *high-resistance* lamp, having a very thin spiral of platinum wire as its incandescing substance set in a globe that was as effective a vacuum as he could get with an ordinary air pump. A second, improved model of this lamp dated from April 1879. The results so far were encouraging; those first lamps burned "an hour or two." He then tackled the dual problem of getting a higher vacuum and also improving the incandescing element, with which inventors had struggled for more than a generation.

The incandescing substance must resist a tremendous heat before it could give light; if the heat were too great it would melt. Carbon had the highest melting point: 3,500 degrees C. But when he attempted to maintain a heat of no more than 1,500 to 1,700 C. in his first vacuum globes, the carbon incandescing substance tended to burn out around that level. He tried other materials: boron, chromium, molybdenum, and in fact "everything." He thought of tungsten, but found he could not use it with existing tools.

A thin wire of nickel seemed to offer promise, during a month of lengthy tests—but the enormous power of the light caused eye pains and almost ruined his eyesight. He was mortified at losing a whole day recovering.

Giving up the troublesome nickel, he came back to platinum, which, though having a lower melting point than carbon, seemed to show a longer life when incandescent. He resumed efforts to obtain a higher vacuum, which was shrewd judgment for that time. In England, Sir William Crookes had lately made great progress toward very high vacuums by means of an improved type of pump, called the Sprengel pump. On learning of this, Edison got hold of one of the first of these new vacuum pumps to reach America. Now a vacuum was obtained that came within one or two millimeters of full exhaustion of air; in

a globe having such a high vacuum the thin platinum wire gave forth a brilliant light of twenty-five candlepower and continued to do so for some time, whereas in the open air it melted at once when raised only to four candlepower.

By now he had reason to congratulate himself, having made considerable progress beyond the stage which had been reached by others attempting to perfect an incandescent lamp—though it was also true that he seemed to be meeting with fresh difficulties at every step. On April 12, 1879, he executed a new patent application for his first high-resistance platinum lamp having an improved vacuum.

But his money was now melting away more rapidly than he had expected. The task he had undertaken looked much longer than was anticipated. The spirits of his financial sponsors began to droop. Meanwhile the first arc lights, introduced in September 1878, were already blazing over lower Broadway in New York, and more were being installed elsewhere with impressive effect. The bankers now began to have serious doubts whether Edison had pursued the right course in trying for an unproved lighting system.

In very friendly spirit, Lowrey reported to Edison that at a recent meeting at Morgan's office, some of his financial backers had expressed serious misgivings. Lowrey urged that instead of trying to conceal any real troubles he faced, for fear that his sponsors might lose control, the inventor should be as frank as possible. Finally, in mid-April of 1879, Edison agreed to hold a private demonstration of his high-resistance platinum lamp for the benefit of his financial partners.

As Francis Jehl, an assistant, relates:

> They came to Menlo Park on a late afternoon train from New York. It was already dark, when they were conducted into the machine shop where we had several platinum lamps installed in series. . . . Mr. Morgan and Mr. Lowrey and the others stopped at the library for half an hour or so while our chief reported to them verbally on the results of his experiments so far.

After the conference, the group crossed the yard to the laboratory, where the "boss" showed them pieces of platinum coil he was using for his lamps, and pointed out the arrangements of lights on brackets along the walls. Then, the room having grown quite dark, Edison gave Kruesi the order to "turn on the juice slowly."

> Today, I can see those lamps rising to a cherry-red, "like glow-bugs," one of the eye-witnesses wrote afterward, and hear Mr. Edison saying: "A little more juice" and the lamps began to glow. "A little more" . . . and then one emits a light like a star, after which there is an eruption and a puff, and the machine shop is in total darkness. We knew instantly which lamp had failed, and Batchelor replaced that with a good one. The operation was repeated two or three times, with about the same results, after which the party went into the library to talk things over until it was time to catch the train for New York.

It was a gloomy gathering that broke up on that cold, raw April evening. All of Lowrey's abounding faith would be needed to rally their spirits and persuade them to shell out more cash. Some rumors of the disappointing demonstration of his platinum lamps now leaked out; as a result, Edison Electric Light stock, which had risen to $600 a share, fell sharply, while gaslight securities began to recover. A leading New York daily reported that "well-informed electricians did not believe that Mr. Edison is even on the right line of experiments."

Edison had found out a good many things: how to make an improved vacuum; how to raise the resistance of his incandescing coil. But he realized that there were fatal defects in his first high-resistance light. Platinum, he saw, was really an obstacle in this hunt, and he had expended enormous effort in struggling with it.

In adversity he could be highly philosophical. "Even if you gave much time and labor to learning the hundreds of wrong ways of doing a thing" he would say, it might lead, in the end, to the right way. But once he became convinced that he had mistaken his path, he could show great resolution and speed in retracing his steps.

"After the exhibition," Jehl said, "we had a general housecleaning at the laboratory, and the . . . platinum lamps were stored away."

FIVE

Toward the Light of the World

"The electric light has caused me the greatest amount of study and has required the most elaborate experiments," Edison said in recollection; "I was never myself discouraged, or inclined to be hopeless of success. I cannot say the same for all my associates." Edison at this point was directing his efforts on a much broader front of the area "under siege." For it must be remembered that it was not only a light he sought; he must try to create "a whole new industry with all its ramifications."

He now followed three main lines of investigation. First, the constant-amperage dynamo available then for arc lights must be adapted and redesigned to be suitable for his new system requiring a constant-voltage current. Second, he directed a group of assistants in the key assignment of perfecting the pumping methods used in exhausting air from his lamp globes to obtain a still higher vacuum. Third, another team, under his own watchful eye, carried out a long series of experiments in which about sixteen hundred materials were tested as incandescent elements in his sealed vacuum globes.

He was, meanwhile, afflicted by the very publicity he had once courted. The favorable public interest first aroused by news of his electric light venture had given way to bitter attacks, which charged that by his want of education and his "feverish methods of research accompanied by propaganda," he

had placed himself before the world as a "charlatan"; his reputation as a scientist was "smirched."

Edison was as jubilant as a small boy when, in midsummer of 1879, the engineering of an improved constant-pressure dynamo was achieved. It bore the same relation to the electric light system as the cheap production of gas from coal did to gaslighting. He had thus laid a firm foundation for his multiple circuit of small high-resistance lights—to which the most exhaustive studies were being devoted at the same time.

But when the new dynamo was described and pictured in October, in a lead article in the *Scientific American,* there was a great scoffing and ridiculing of Tom Edison's "absurd claims." The hectoring of Edison by some of the leading American electrical experts, among them Dr. Henry Morton of Stevens Institute, now seems to us traceable to their own real ignorance of actual dynamo problems. Edison, on the other hand, was opening up new paths.

From the very outset of his work, Edison was guided by his concept of a *whole electric distribution system* of which all the parts must be fitted into place. In contrast with other inventors, who searched only for some magical incandescing substance, he worked out all the supporting structure of his system: its power supply, conductors, and circuit, and then came back to determine what kind of light would be demanded by it.

Reading Dr. Morton's positive predictions of failure for his whole enterprise, Edison grimly promised himself that, once he had it all running "sure-fire," he would erect at Menlo Park a little statue to his gloomy critic which would be eternally illuminated by an Edison lamp.

The alleged "mechanic" who was said to lack education was to be found reading scientific journals and institutional proceedings at all hours of the day or night. The new opportunities to test the incandescent qualities of metals and carbons, under the conditions of a vessel highly exhausted of oxygen, now allured Edison.

"There never had been a vacuum produced in this country that approached anywhere near the vacuum which is necessary for me," he wrote in his notebook. He had his boys pumping away for dear life, until by August 1879 he had all but one one-hundred-thousandth of an atmosphere expelled from his glass globe. A hundred-thousandth part was too much; the battle must go on. Then, in late summer, the Edison team succeeded in making a pump by which a vacuum of one-millionth part of an atmosphere was obtained.

With growing excitement he realized that two key positions had been won. He had his constant-voltage dynamo and a high vacuum. All that remained for him, then, was to discover an illuminant that would endure.

In early September, after about a year's search, Edison turned back to experimenting with carbon again as his illuminant, and this time for good. Carbon had the highest melting point and the highest resistance.

He was of course extremely familiar with the properties of carbon. In a shed in back of the laboratory there was a line of kerosene lamps always burning, and a laborer engaged in scraping the lampblack off the glass chimneys to make carbon cake. "Oh, Mr. Edison, the lamps are smoking," visitors to Menlo Park sometimes warned him.

"Yes, I must remind them to turn the wicks down," he would answer banteringly. But he did nothing of the sort. He had the cakes of carbon brought to him and kneaded them with his fingers into fine reeds.

After considerable calculation, Edison estimated that the carbon should not be over one sixty-fourth of an inch in diameter! He also estimated that the carbon filament should be about six inches long.

It was a bold undertaking: reducing the illuminant to the thinness of ordinary heavy sewing thread. Would so slender a reed of carbon support those high temperatures, where thick rods had melted? By grace of the improved vacuum, they hoped to succeed.

* * *

Through the summer months Edison and his staff worked at the tantalizing job of making fine reeds of carbon lampblack mixed with tar behave properly in an incandescent lamp. His assistants kept kneading away at this puttylike substance for hours and hours.

Before long they were able to make threadlike filaments as thin as seven one-thousandths of an inch. They then tested them; the tests required infinite pains and were time-consuming. This was indeed promising; the threads lasted an hour or two before they burned out. But it was not yet good enough.

In the later stages of this long campaign, Edison drove his co-workers harder than ever; they held watches over current tests round the clock, one man taking a sleep of a few hours while another remained awake.

At this stage of his life Edison worked with minimum rest periods of three or four hours a day, his enormous recuperative powers helping to sustain him. He would doze off for a catnap one a bench, or even under a table, with a resistance box for his pillow, but his assistants had orders to waken him if anything occurred that required his attention.

Tension among the laboratory force increased during the late summer days of 1879, as the several components of Edison's incandescent lighting system were being perfected. But the "chief mucker" also knew how to divert their minds by serving some food and light wine after they had been working late at night, or by sitting down to swap stories with his men, or listen to music they made up for the squeaky tinfoil phonograph.

One of the assistants on one occasion regaled his companions by improvising a parody of Gilbert and Sullivan's *H.M.S. Pinafore* in Edison's honor:

For I am the Wizard of the Electric Light,
And a wide-awake Wizard too. . . .

The impersonal records of the laboratory notebooks for October 1879 show Edison's mood of anticipation pervading the whole staff at this stage. He had been pushing on with hundreds of

trials of extremely fine lamp filaments, so attenuated that no one could conceive of how they would stand up under terrific heat.

He had tried various methods for treating cotton threads before carbonizing them, but they would break. Finally he packed them with powdered carbon in an earthenware crucible which was then sealed with fire clay and heated at high temperatures. At last he had a firm, unbroken carbonized thread, or a filament. It was, however, very hard to handle, being then fastened by delicate clamps to the end of platinum lead-in wires. It was actually the ninth of a series of very fine incandescent filaments Edison had carefully constructed. Afterward, Edison related, it was necessary to take to the glassblower's house in order to seal it within a globe.

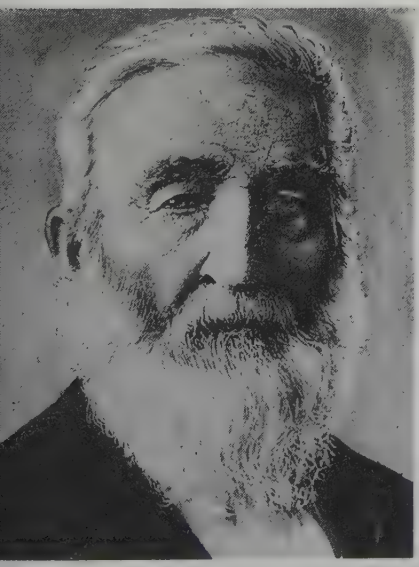
> With utmost precaution Batchelor took up the precious carbon, and I marched after him, as if guarding a mighty treasure. To our consternation, just as we reached the glass-blower's bench the wretched carbon broke. We turned back to the main laboratory and set to work again. It was late in the afternoon before we produced another carbon, which was broken by a jeweler's screw driver falling against it. But we turned back again and before nightfall the carbon was completed and inserted in the lamp. The bulb was exhausted of air and sealed, the current turned on, and the sight we had so long desired to see met our eyes.

The trial of the No. 9 model of carbonized cotton filament was put on late during the night of October 21. There was no sleeping that night. The men looking on were thoroughly used to these things fizzling out. But the notebook entries for that night convey the results:

> No. 9 on from 1:30 a.m. till 3 p.m.—13 ½ hours . . .

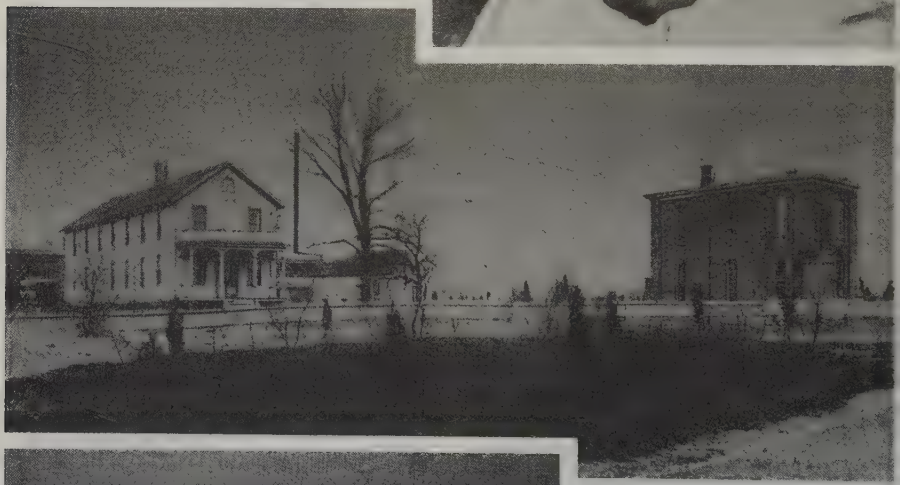
The tales that were woven about that triumph featured a "death watch" of "forty hours" maintained by Edison and five

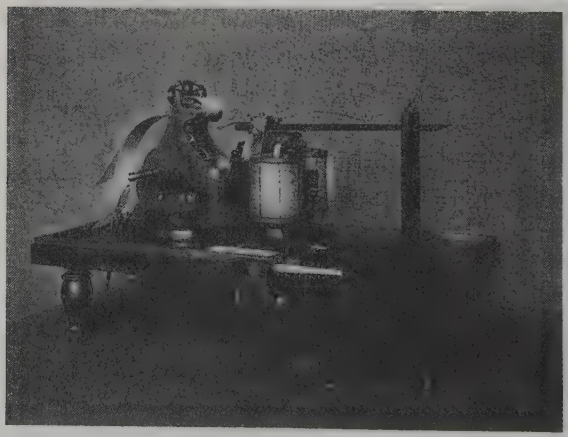
Above, the house in Milan, Ohio, where Edison was born on February 11, 1847. Right, Edison's mother, Nancy Elliott Edison. Below left, Edison's father, Samuel Edison, Jr. Below right, Thomas Alva Edison at age 14, when he worked as a newspaper boy for the railroad.



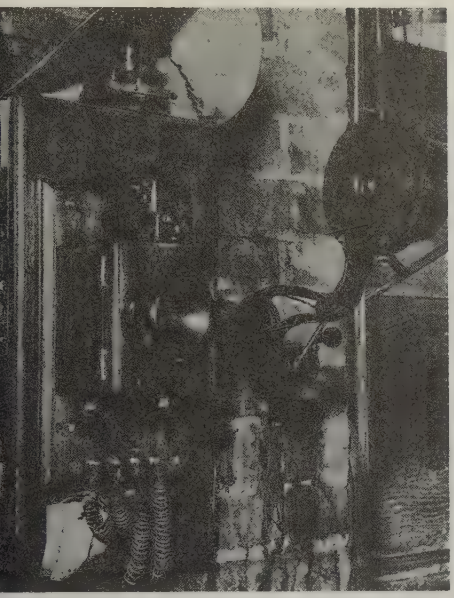
Mary Stilwell,
Edison's first wife.

This photograph of the laboratory in Menlo Park was taken in 1875.



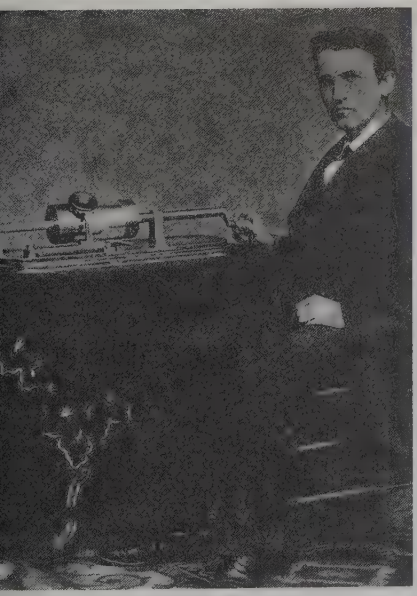


F. B. Morse's second telegraph, 1846.



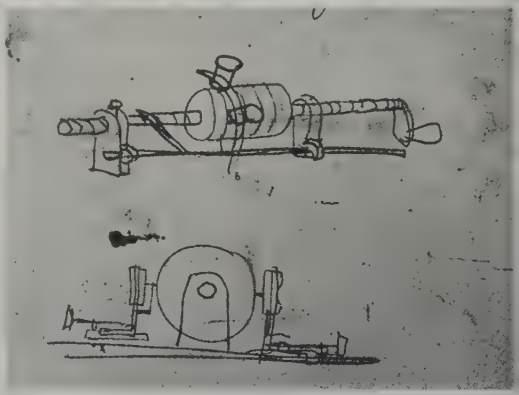
Edison's telephone with carbon microphone, 1879.

A model of the stock ticker that could transmit stock prices telegraphically.



Edison with his phonograph, April 1878.

Recording a piano performance with Edison's phonograph.

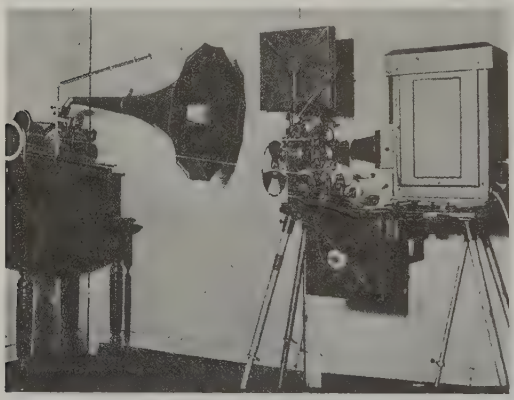


Design sketches by Edison used to construct the first phonograph.

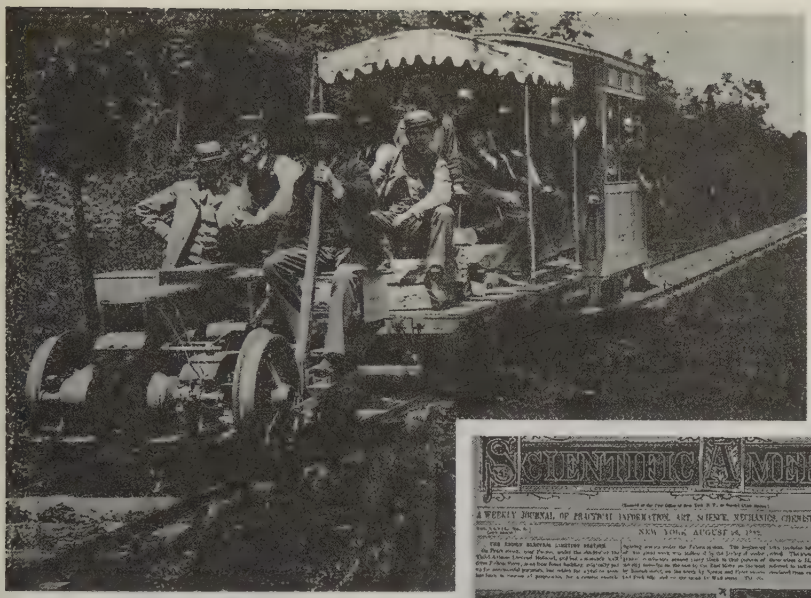
Edison's 1877 phonograph is the forerunner of the gramophone.

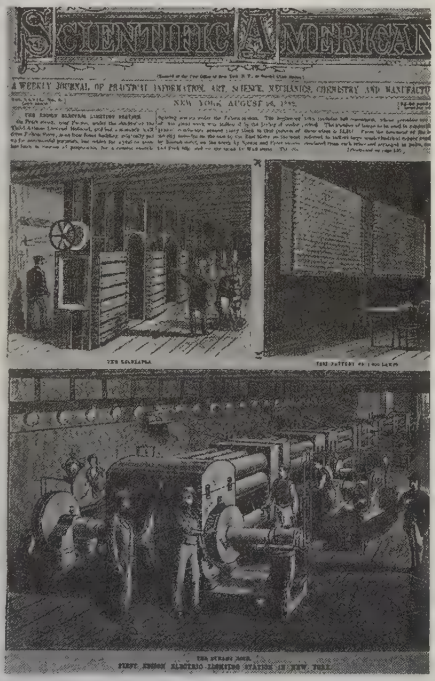
The successful light bulb experiment of October 21, 1879. This drawing by H. K. Flemming shows Edison (third from the right) surrounded by his coworkers. Right, a reproduction of the light bulb.

At the 1889 Paris World's Fair, Edison's inventions took up an entire section of the exhibition.



Above, Edison set up the world's first film studio outside his West Orange laboratory. Left, by combining his kinetoscope with a phonograph, Edison invented a prototype of the sound-film projector. Below, Edison with one of his projectors.




SCIENTIFIC AMERICAN

A WEEKLY JOURNAL OF PRACTICAL INFORMATION, ART, SCIENCE, MECHANICS, CHEMISTRY AND MANUFACTU

NEW YORK, AUGUST 26, 1882.

Above, trial run of Edison's electric locomotive, 1880. Right, the August 1882 edition of *Scientific American* contained a report on Edison's New York power station. Below, in 1889 Edison had already built the first car with an electric motor.

Edison with his second wife, Mina (seated), and their children: Madeleine, Theodore, and Charles.

A photograph of the great inventor taken in 1908.

Edison in 1910 with Mina sitting in the inventor's electric automobile.

of his associates. The evidence of the records speaks only of an incandescent lamp that burned for more than half a day, that is, thirteen and a half hours; but there is frequent mention of a lamp having burned forty hours—very possible they wrote down no notes of this, in the excitement of the moment.

Contemporary accounts of this historic event, appearing soon afterward, described Edison turning on the current for the perfected lamp:

> Presto! a beautiful light greeted his eyes. He turns on more current, expecting the fragile filament to fuse; but no, the only change is a more brilliant light. He turns on more current and still more, but the delicate threat remains entire. [Edison said, "We sat and watched with anxiety growing into elation."] Then with characteristic impetuosity and, wondering and marveling at the strength of the little filament, he turns on the full power of his machine. . . . For a minute or more the tender thread seems to struggle with the intense heat—that would melt diamond itself—then at last it succumbs and all is darkness. The powerful current had broken it in twain, but not before it had emitted a light of several gas jets.

As it went out the weary men waiting there jumped from their chairs and shouted with joy. Edison remained quiet, then said, "If it can burn that number of hours I know I can make it burn a hundred." He took up the broken filament and examined it under the microscope, noting how its structure had changed. He knew at last that the high-resistance element he wanted must be fibrous in structure, some form of *cellulose*. He would look for still better materials than cotton thread, which broke too readily.

The October 21, 1879, lamp gave but a feeble, reddish glow, but it was the best and most practical incandescent light contrived in more than fifty years of inventive effort, the future light of the world.

* * *

For once he tried to be discreet and keep his discoveries a secret until he had improved upon his lamp filament. He wanted a more serviceable illuminant, and, since the cotton thread was a vegetable fiber, he reasoned that some other vegetable substance of fibrous character would provide the answer. His laboratory staff was then put to work testing a long list of similar materials, among them bagging, baywood, boxwood, cedar shavings, celluloid, fishline, flax, coconut shell, hickory, plumbago, punk, twine.

But in the end it was paper, in the form of tough cardboard, that proved most enduring and infusible when carbonized and reduced to a hairlike filament. Edison was exultant when this filament burned for 170 hours, and swore that he would perfect his lamp so that it would withstand 400 to 1,000 hours of incandescence, before any news of it was to be published.

On November 1, 1879, he executed a patent application for a carbon filament lamp, which was quickly granted as U.S. Patent No. 223,898. It was not the "first" electric light, nor even the first incandescent electric lamp. It was the first practical and economical electric light for universal domestic use. It opened the way to the electrification of men's dwellings throughout the world, and introduced the large-scale production and sale of electric power itself.

It was early in November 1879 that the worried capitalists who had supported Edison's venture learned the secret of his success. Two of J. P. Morgan's partners paid a quiet visit to Menlo Park a short time later, and found that Edison's house was brilliantly illuminated by the new lamps.

During the first thirteen months Edison had expended $42,869.21 on experimental work, not counting legal, patent, and other expenses, most of which had been met by the Edison Electric Light Company. Now he raised the question of further money advances for experimental and development work, so that he might complete a pilot light-and-power station at Menlo Park.

Edison pointed out that he had spent out of pocket more money than he had been given and pleaded for continued sup-

port. But the directors were stony. They were uncertain, as yet, about the future of his invention. Was it "only a laboratory toy," as one of them charged? Would it not need a great deal more work before it became marketable?

The future electric light and power industry, now aching to be born, would be valued, for its American section alone, at roundly fifteen billion dollars at the time of the inventor's death. Yet there was prolonged haggling before another comparatively small sum was advanced to Edison, early in 1880, through loans by the original stockholders. And this was only obtained after Grosvenor Lowrey, still Edison's staunchest supporter, made the secret of the electric lamp public—prematurely, and over Edison's objections. The lawyer foresaw that the news would startle the world and convince doubters among his fellow capitalists.

But rumors had been spreading about the ill-kept secret for several weeks. New Jersey neighbors told of brilliant lights blazing all night at Menlo Park; and railroad passengers between New York and Philadelphia also saw the bright lights, with astonishment, from their train windows. In Wall Street there was a flurry of speculation in Edison Electric stock, only a few shares of which were available as yet; the price rose, for a brief period, to a level of $3,500 a share—on the mere hopes or prospects of Edison's success.

Then came the front-page story in the New York *Herald,* on Sunday, December 21, 1879:

EDISON'S LIGHT
THE GREAT INVENTOR'S TRIUMPH
IN ELECTRICAL ILLUMINATION

A SCRAP OF PAPER

IT MAKES A LIGHT WITHOUT GAS
OR FLAME, CHEAPER THAN OIL

SUCCESS IN A COTTON THREAD

The story of the inventor's fourteen-month struggle was now told to the world, and acclaim for Edison reverberated again on

both sides of the Atlantic. As Lowrey had foreseen, the news "shook the scientific world to its foundations." Scarcely two years before, thanks to his phonograph, Edison had gained international celebrity. Now Menlo Park was again to be invaded by thousands of scientific pilgrims and plain curiosity seekers.

In the week following Christmas 1879, hundreds upon hundreds of visitors made their way to the world-famous New Jersey hamlet to see "the light of the future" and to pay homage to its good "Wizard." The closing nights of the year 1879 actually turned into a mass festival, which reached its climax on New Year's Eve, when a mob of three thousand sightseers flooded the place. The crowds never seemed to tire of turning those lights on and off, as they moved slowly through the rooms of the laboratory.

But they had also come to see Thomas A. Edison. The cry would go up, "There's Edison," and a rush would start toward him. As usual, he appeared in his working clothes, which were almost of a deliberate negligence, a white handkerchief at his throat in place of a cravat, and his vest half buttoned.

What they saw here was but a token of what was in store for them in the near future, the inventor promised. He was waiting for the completion of his new generator, he said, and intended to illuminate all the surroundings of Menlo Park, for a square mile, with eight hundred lights. After that he would light up the darkness of the neighboring towns, and even the cities of Newark and New York! His lamp would be sold for twenty-five cents, he predicted, and would cost but a few pennies a day to run. At the moment the lamps were very costly to produce, for it took two men six hours to pump a high vacuum for his globes, and only a few score lamps were on hand.

As a result of the wave of publicity the directors of the Edison company now willingly "coughed up" another $57,568 for the inventor's proposed development work in the next twelve months. He had won a great battle, yet the campaign was far from ended.

The future commercial value of the incandescent light was now established beyond question; but it remained for him to

put a complete central-station lighting system in operation on a large scale. This would mean facing many more problems, inventing numerous electrical appliances then unknown, and in fact developing a whole new art. In such development work Edison would be driven to efforts even more original than the work on the lamp itself.

"Remember, nothing that's good works by itself, just to please you," he used to say; "you've got to *make* the damn thing work."

From the first, Edison had never ceased working over his larger plans for a complete *system* that would supply power and heat as well as light. For its components it would need new dynamos, safety fuses, power switches, insulating materials still in the experimental stages, meters to measure current, and a whole family of varied lighting fixtures, sockets, and service wiring for households. Without this system the miraculous incandescent lamp was a scientific toy until it could be commercially exploited and made useful as one of many thousands of such units functioning within a complete lighting circuit.

Although Edison had an overall plan for such a system in mind, the grand design of a central power station and spreading network of wire was to be achieved only after some three years of trial and error. It was only then that Edison would be ready to march on New York. It was only then that the completed "Edison system"—which eventually impressed informed persons as being so comprehensive, so "beautifully conceived" in all its detail—became what he had hoped for: a giant distributing mechanism as practical and economical as that of gas.

In the second year of the electric light campaign, things seemed to be moving all too slowly, though Edison was making a whole series of strategic inventions that were to bring his system to completion. During the one year, 1880, the indefatigable man applied for sixty patents, among them five covering auxiliary parts, six covering dynamos, thirty-two pertaining to improvements in incandescent lamps, and seven to advanced

systems of current distribution. The last group of devices was scarcely exceeded in importance by the invention of his incandescent lamp. When one of them, the feeder-and-main system, was patented and demonstrated in England, Lord Kelvin, who was present at the demonstration, was asked why no one else had ever thought of it before, since it was so simple and yet eliminated the serious loss of pressure always expected in a parallel circuit. He is said to have replied, "The only answer I can think of is that no one else is Edison."

Some members of the Vanderbilt-Morgan syndicate, however, were rather alarmed at the way Edison used up about $150,000 that year—for machinery, steam engines, dynamos, copper wire, and sundry materials—merely to test a pilot plant at Menlo Park. But a new and enthusiastic supporter of Edison, who became first an investor and then a director of the Edison Electric Light Company, was the railroad magnate Henry Villard. After having seen the first public exhibition of the incandescent lamp at Menlo Park, he encouraged the inventor by expressing high hopes for the future of the new industry. A few months later, in the spring of 1880, he appeared at Menlo Park and invited Edison to install an independent lighting plant in the new S.S. *Columbia,* then under construction for the Villard-controlled Oregon Railway & Navigation Company.

The contract for the S.S. *Columbia* required the installation of an independent lighting plant for a large steel ship of 3,200 tons, and 334 feet in length. This was to be the inventor's first commercial lighting plant of the "isolated" type, improved versions of which would later be installed in hotels, stores, and private mansions. It also proved to be a most useful rehearsal for the larger central station work that was to follow. Edison and Batchelor supervised all the work, which was finished in time for the departure of the *Columbia* on its long voyage around Cape Horn to California. The ship made a most brilliant display by night as it sailed down Delaware Bay.

Henry Villard proved an enthusiastic supporter of another new project. In the spring of 1880 the residents of Menlo Park, inured though they were to strange sights and sounds, saw

something wholly unexpected. A gang of laborers began laying ties and rails out in the open fields adjacent to the laboratory to make a narrow-gage railway track running out a third of a mile around a hill and then back to the starting point. Not long afterward, a little iron monster about six feet long and four feet wide was placed on the tracks. It was in fact the first full-sized electric locomotive ever made in America.

With the locomotive, Edison tried to give the impression that he was merely "playing on the job" while waiting for new machinery for his large light plant to be completed. But if it was sport, he entered into it with his usual verve. As an old railroader himself, Edison added a big searchlight to the head of the locomotive and a bell to warn off cows, while a small open-air passenger truck was coupled behind.

On the day of the trial run, Edison gave the order to switch current onto the railway track, and bravely mounted the locomotive. The light-fingered Batchelor was at the throttle, and some twenty persons in addition crowded aboard the locomotive and truck.

"All aboard!" Edison cried in his high voice. "Fire her up!" The crowd hurrahed and waved handkerchiefs gaily, as Batchelor closed the switch. The little train started slowly, gathered speed, and bumped along on the rough track until it was brought to a halt at its terminal. But when the switch was reversed, in order to go back over the same course, Batchelor had to apply the lever with some force, so that the friction wheels burst and the locomotive was disabled. But within three weeks the locomotive was again pulling well enough for Edison to demonstrate it before his financial backers, the directors of the Edison Electric Light Company.

Villard, a firm believer in electricity as a motive power for transportation, was most enthusiastic, and advanced the inventor forty thousand dollars, to cover extended experiments with an improved engine. But a whole combination of untoward circumstances brought Edison's pioneering work in railway electrification almost to naught. The patents for this group of inventions were eventually assigned to the Edison

Electric Light Company, but the directors refused to invest any large sums in it. Also, Edison's electric railway patents turned out to be poorly drawn; interference suits were entered against him by a rival inventor, Stephen D. Field. the Edison company directors eventually decided that it was advisable to join forces with Field and thus settle the patent suits.

Edison took little part hereafter in the electric railway enterprise, which was managed by Field, and had no part in the vast profits ensuing from it. For him the electric locomotive had been a distraction, a beloved "hobby"—during the intervals when he waited for the completion of the big machines and boilers needed for his lighting system.

Strenuous preparations for a second "full-scale" demonstration of Edison's incandescent lighting system were again under way. The delays, unexpected breakdowns, and actual dangers met with in this undertaking would have been enough to dishearten any inventor. And one trouble was that Edison himself, eternally dissatisfied, kept changing his plans; he saw greater economies to be won by more powerful engines and larger dynamos, and kept throwing out his old machines to order new ones.

"Our system is not a guess nor a hazard," Edison proclaimed. Unlike others, he had "no stock to peddle"; he would not move until his plan for domestic electric light distribution was complete and "figured down to the smallest item."

To help accomplish this he mapped out an area in Menlo Park of about half a square mile surrounding the laboratory and, along the lines of imaginary streets, set out white wooden lampposts. The half-dozen neighboring houses all were wired, as was the group of laboratory buildings and shops, for the installation of 425 lamps. Current was supplied from a central power station in an annex of the laboratory, consisting of eleven dynamos. Dissatisfied with this numerous array of small dynamos, Edison had the design of a large-capacity dynamo undertaken.

That Christmas of 1880 snow fell, and at last the central station at Menlo Park was ready, as hundreds of visitors arrived to see its promised illuminations. A contemporary relates:

> In every direction stretched out long lines of electric lights, whose lustre made wide white circles on the white-clad earth. One could not tire of gazing at those starry lines. Edison did not bother about his overcoat as he walked in the open air. In an instant all was dark . . . in another instant the whole scene of fire and ice sprang into being again. "Eight miles of wire!" Edison exclaimed; and yet he observed, some people were not satisfied with his demonstration.

Meanwhile, the relations between the inventor and his bankers continued to be, at best, those of an uneasy coalition between opposing interests and temperaments. As he prepared to take up the next phase of development work, the lighting of great cities from central stations, Edison again felt himself held back by his financial sponsors. For months he had been pressing the directors of his company to furnish capital for new manufacturing enterprises that would supply incandescent lamps, light fixtures, sockets, switches, fuses, fuse blocks, meters, voltage regulators, and dynamos that were essential to his central-station lighting ventures. But the directors wanted none of the headaches or limited profits of manufacturing.

"Wall Street could not see its way clear to finance a new and untried business," he said later. "We were confronted by a stupendous obstacle. Nowhere in the world could we obtain any of the items or devices necessary for the exploitation of the system. Thus, I was forced to go into the manufacturing business myself."

In the summer of 1880 he set up a factory for making incandescent lamps—the first in the world—in an old barn across the tracks from the Menlo Park laboratory. It was started on a shoestring capital of ten thousand dollars, almost all raised by

himself and his associates. At first about two hundred hand operations were needed in making these lamps, so that they cost $1.21 each; Edison, however, contracted to sell them to the Edison Electric Light Company for eighty cents. Within a year they were employing 133 men, turning out a thousand lamps a day, but "stacking up" half of them, since there were not enough users to buy them as yet.

Again Edison dipped deeply into his resources; selling some of his Edison company shares or borrowing against them, he organized more factories in which electrical accessories were to be made. Early in 1881 Edison's old mechanic, Sigmund Bergmann, went into equal partnership with him and opened a shop in New York which was to supply lamp sockets, switches, fuses, light fixtures, chemical meters, and other instruments, all devised by Edison. Bergmann, who proved to be an able manufacturer, had to expand his quarters within a year and employ three hundred men.

Next, Edison began making dynamos, a difficult and unfamiliar business, calling for huge factory space, much machinery and equipment, and a large labor force.

In the course of 1880 and 1881, Edison, by heavy borrowing, risked all the fortune he had in order to launch the manufacturing enterprises associated with an entirely new industry, that of electrical equipment. Though his Wall Street friends remained skeptical and declared themselves bewildered by his unorthodox business methods, he as an entrepreneur was doing the most constructive thing of all: carrying out the formation of new wealth, based on his own inventions.

Another important turn of events was the winning of a New York City franchise by the Edison parent company in April 1881, permitting it to lay underground mains in the streets of New York, and distribute and sell electric light. Economy tests revealing that Edison's lights could be operated at a fraction of one cent per hour, or approximately the cost of gaslight, were heartening to the leaders of great banking, railway, and telegraph enterprises.

They loosened their purse strings and supplied the inventor with fresh funds, about eighty thousand dollars in all, with which he would be able to begin building the central station for New York City. For this purpose another subsidiary corporation, called the Edison Electric Illuminating Company of New York, was organized. This was the pygmy ancestor of the present-day Consolidated Edison Company.

During the winter of 1880 to 1881 the inventor kept rushing back and forth between New York and Menlo Park, attending to a multitude of affairs that were coming to a head. He saw that he would now have to establish himself in the great city in order to supervise the building of the first central station, upon which so much depended.

In February 1881 he returned to Menlo Park from a highly satisfactory conference with his "money men," as he called them, and to his associates seemed to be "boiling over with enthusiasm and energy."

"Come on," he cried to Charles Clarke, his chief engineer, "pack up and come with me to New York. We're going to begin business right away."

Edison thought he was leaving the seclusion of Menlo Park only temporarily; but the remove to New York marked another turning point in his life and the beginning of a long period of furious activity. For his headquarters and showroom a large and ornate four-story mansion at 65 Fifth Avenue, just below Fourteenth Street, had been leased. It was near the center of the fashionable residential and shopping district of the city; its elegantly furnished and spacious rooms gave an impression of dignified luxury appropriate to the growing fame of the inventor and his company.

"We're up in the world now!" Edison exclaimed at this time to an old acquaintance. "I remember ten years ago I had to walk the streets of New York all night because I hadn't the price of a bed. And now think of it! I'm to occupy a whole house on Fifth Avenue."

Since Edison counted on a fairly long sojourn in the city he had brought his wife and three children to live near him in a hotel adjacent to Gramercy Park. He had not much time for his family, however, for he was promoting the Edison system night and day. He had installed a small steam engine to run generators for a house lighting plant which made his Fifth Avenue place a brilliant show at night. After seeing the brave new lights at Edison's house, W. H. Vanderbilt and his wife ordered a similar electric plant for their palatial home on Fifth Avenue; thereupon J. P. Morgan ordered the same for his own residence on Madison Avenue.

Meanwhile, with an eye on future international business, Edison had some members of his Menlo Park staff in Europe preparing exhibitions of model lighting stations for expositions to be held later that year in Paris and London. It was thanks to Edward H. Johnson, who was supervising the work in London, that a young man named Samuel Insull arrived in the United States from his native England on March 1, 1881, to take up employment as Edison's private secretary. After having worked as a clerk at the Edison office in London for two years, the twenty-one-year-old Insull was sent to Edison, on the urgent recommendation of Johnson, as a youth with a real head for business. He would soon become Edison's financial factotum.

The new secretary's first impression was that Edison "was engaged in a gigantic undertaking." He was fighting the gas companies; he was struggling with the difficulties of getting the machinery he needed; he was taking over some large works and told Insull he counted on employing fifteen hundred men within a few months. All sorts of jobs were being done at the same time and with no little confusion. He had even established a school on the top floor of his Fifth Avenue headquarters to train men in the new art of electrical lighting service.

In that summer one would often have found Edison in the back parlor at 65 Fifth Avenue, sitting on a high stool placed before a large wall map, about twelve feet high by fifteen feet wide, which he studied incessantly; it represented a chosen dis-

trict of lower Manhattan. This he had selected as the area for his first city station. His first intention had been to cover a district of about a square mile, running south from Canal Street to Wall Street; but in the end he greatly reduced this area.

The power station he envisaged would be placed as nearly as possible in the center of this district, with its conductors in underground conduits running out in all directions to the outlets of consumers. After prowling all about the section, he determined upon a site at 255–257 Pearl Street, which he purchased early in August 1881.

Pearl Street had come down in the world since the days in the early nineteenth century when it was lined with fashionable taverns and thronged with fine carriages. Now it was squalid. Nor did the building at 255–257 add to its charm. Yet this homely edifice was to be the cradle of the modern electric light and power industry.

The arduous breaking of earth for underground mains began in the late fall when frost was almost upon them. Other early electrical services, from telegraph and burglar-alarm systems to arc lights, all used overhead wires strung on poles or simply running from roof to roof. It was a cheap method; and, in the opinion of many experts, it avoided leakage of electric current into the earth.

Edison insisted, however, that his plan would eliminate all danger of shock or fire from short circuits. "You don't lift water pipes and gas pipes on stilts," he protested. Though directors of his own company objected to the additional expense for insulation and tubing, Edison was determined that safe procedures be established at the outset.

There were fourteen miles of trenches to be dug and much tubing to be laid in the district served. The illustrated newspapers of the time show Edison in a battered stovepipe hat directing this work and personally overseeing the installation of all couplings and safety-catch boxes.

Sometimes the day's work ended so late that Edison and some of his helpers slept in the cellar below the unfinished power station in Pearl Street. Two of the men who aided him,

after sleeping in that cold and damp cellar that winter, became sick and died, while he himself, as he related, was never affected.

With the coming of winter, Edison and his labor gangs down in the trenches had been forced to halt excavation work. Time was passing, yet New York still waited for the opening of Edison's power station. The excavation work and laying of mains was resumed at a frantic pace in the spring of 1882, but the job was not completed until June.

Early the next month the central station at Pearl Street was furnished with four great boilers, six steam engines, and the first three of six improved jumbo dynamos, so named by Edison after P. T. Barnum's famous circus elephant. In addition, switchboards and control instruments were installed in the station, and on an upper floor, a bank of one thousand electric lamps with which to test the system.

On July 6, 1882, Edison, having fired up the boilers several days before, threw the switch for a trial run of the first jumbo. Three days later, on a Sunday, when the business area was quiet, he connected a second jumbo dynamo to the first, admitting that his heart was in his mouth as the engines engaged.

One of those present has related:

> It was a terrifying experience. . . . The engines and dynamos made a horrible racket, and the place seemed to be filled with sparks and flames of all colors. It was as if the gates of the infernal regions had suddenly opened.

Edison later recalled that he grabbed the throttle of one engine while Johnson, the only other person present who kept his wits, caught hold of the other, and thus they shut off the engines. Not until new steam engines with specially designed mechanical governors were installed could the trouble be corrected.

The premiere at Pearl Street, so long awaited, so oft postponed, loomed up at last in the late summer of 1882. "I kept

promising through the newspapers that the large central station in New York would be started at such and such a time," Edison confessed. "These promises were made more with a view to keeping up the courage of my stockholders, who naturally wanted to get rich faster than the nature of things permitted."

He recapitulated the events of that day and described his own inner tension:

> The Pearl Street station was the biggest and most responsible thing I had ever undertaken. It was a gigantic problem, with many ramifications. . . . All our apparatus, devices and parts were home-devised and home-made. Our men were completely new and without central-station experience. What might happen on turning a big current into the conductors under the streets of New York no one could say. . . . The gas companies were our bitter enemies in those days, keenly watching our every move and ready to pounce upon us at the slightest failure. Success meant world-wide adoption of our central-station plan. Failure meant loss of money and prestige and setting back of our enterprise. . . . I had been up most of the night rehearsing my men and going over every part of the system. . . .

For once, he avoided any ballyho in connection with the official opening at Pearl Street, for he was haunted by the fear that something might happen to spoil the party. Steam was admitted to one of the jumbo dynamo-steam units in operation; and at 3:00 p.m. on Monday, September 4, 1882, Edison gave the order to pull the switch. The current flowed forth through the underground conductors and the Edison lights went on in the first district against the full sunlight of a summer afternoon, therefore giving a rather feeble effect.

It was anticlimactic, after so many ardors and alarms. Despite the tall talk of a central station that was to light thousands of buildings through one circuit, the Edison Electric

Illuminating Company opened for business with only eighty-five customers fully wired and a total load of only four hundred lamps.

Somehow the metropolitan newspapers had got wind of the affair, and their representatives were on hand to cover it with modest little stories destined for the inner pages. "Most of the principal stores from Fulton and Nassau Street," the *World* reported casually, "were lighted by electricity for the first time." And *The New York Times* observed: "It was not until about 7 o'clock, when it began to be dark, that the electric light really made itself known and showed how bright and steady it was." The *Times* itself already boasted of fifty-two Edison lamps in its editorial and counting rooms—"soft, mellow, grateful to the eye; it seemed almost like writing by daylight."

Edison's electric light and power business began in America's greatest city without fanfare and in the early years grew but slowly. "Look, the Edison lamps have been turned on," people said simply, at the start of the first city power station in America, and that was that. Only after many months and, indeed, years, had passed did men come to realize what Edison had wrought in that crude central station in dingy Pearl Street. It was, in fact, nothing less than the long-hoped-for industrial marriage of steam and electric force. Almost unaware, the world began to move out of the age of James Watt into the Electrical Age.

More than fifty years had passed since Michael Faraday had discovered the mechanical production of induced electricity and had been possessed by a vision of the future electric power. It needed Edison, however, as well as Faraday, Ampère, Arago, and other scientific explorers, to make the Electrical Age. For it was Edison who had finally *applied* the knowledge of electrical science that had been accumulating during those fifty years, creating new wealth immeasurable, new convenience and enjoyment, and a new tempo of life.

His campaign for his electric light and power system had consumed four years of Edison's life, roughly from age thirty-one to thirty-five. He was now gray-headed, but still youthful in

appearance, his round smooth-shaven face unmarked and unlined, and strong as ever. He seems also to have been so highly stimulated by his recent activities that he fairly proliferated important inventions of all sorts in these years. On the opening day in Pearl Street he could say truthfully, with that pride in his workmanship that he never bothered to conceal, "I have accomplished all that I promised!"

FIVE

The Middle Years: Second Marriage

In those hurried years of the earlier half of his career Edison had virtually no private life; the relaxed enjoyments of home, a personable wife, his young children, were things he tasted quickly and sparingly. It was in his "man's world," where all were masculine and bearded fellows, who worked long and swore hearty oaths while they worked, that he was most himself and knew his greatest pleasures.

He clung to his old-fashioned notions of women's mental inferiority. "Women as a class are inclined to be obstinate. They do not seem to want to get out of the beaten path." Such opinions or prejudices were strengthened by his feeling about his first wife, Mary, a good and simple woman of limited education, who, as he fully realized, scarcely knew anything of what was going on in her husband's head.

Their married life might have been unhappy had Mary not been so gentle, so reconciled to her lot. In the small hamlet of Menlo Park, though it had become world-famous, her own life was one of dull loneliness. The Edisons lived in a substantial and comfortable home; there was a staff of two Negro servants and a coachman; a barn and stable with horses and carriages in the yard; a summer house on the big lawn. But Mary Edison, seeing all too little of her husband, and left much alone with her children, had only the wives of his married associates as her companions.

At the time of the electric light project Edison never came home at all for weeks on end, according to a close neighbor, who saw him finally one morning "coming along the plank path to his house walking as though he were asleep." Some carpenters were at work in the house and Mrs. Edison sent them away, saying, "He has gone into my spare room and rolled right over on the bed in all his dirt and grease, on my nice counterpane and pillow shams, but I don't care, as long as he gets rest and sleep."

By the 1880's new honors and dignities clothed her. Was she not the consort of one of America's first citizens, whose fame overleaped the oceans? Yet she remained modest and self-effacing. On the few occasions when she appeared at the laboratory the workmen regarded young Mrs. Edison, now grown quite stout, with unconcealed admiration. They were proud of her—for she had been one of their own rank in the Newark shop and yet remained as gracious and friendly as ever.

Though often quite distrait with his wife, Edison was far from indifferent; indeed he felt a strong attachment to her; she was, after his mother, the only woman in his life up to that time. She had shared the lean years with him. Now he was a rich man and he could bring Mary the most costly gifts. Thus, in her first year of residence in New York, she made an impressive appearance one day at a tea party—all bejeweled, dressed in a gown of the richest brocade.

When the pace of work permitted relaxation, Edison would devote his Sundays to his family, sometimes taking them to a nearby beach. In his lighter moments he could be merry enough, bantering his wife and teasing the children; on those Sunday excursions Mary Edison was always "proudly happy" as she rode off with her husband by her side. When at home on a Sunday, however, Edison's mind would go spinning along, absorbed in problems and experiments. At meals he would often say little to his family, eat quickly, and leave the table before the others.

The stories of his playing with his children date mostly from the earlier years of his first marriage. By way of toys he

would bring a batch of old alarm clocks for them to "experiment" with. Sitting down on the floor, he would take the clocks apart and put them together again, bidding his boys to do likewise, hoping that they would become fascinated by the mechanical arts. Disappointingly, his small sons, Tom junior and William Leslie, showed no passion for rusty alarm clocks.

Usually Edison's love of mischief—which on occasion showed a vein of playful cruelty—came out in his games with his children. One day he brought home a little glass toy in the form of a swan and invited one of the children to put the tail of the swan in his mouth and blow. The child was not amused when, from the neck of the swan, water sprayed all over his face.

The children found their father not so much unkind as puzzling, and often "difficult." Marion, the eldest, being a girl, was not expected to become an inventor. She was tall, blond, pretty, and had her father's verve. Edison tended to be more affectionate with her than with his sons. When only ten she had her own pony and cart and used to drive about the village at a fast clip. Of the children only Marion was allowed to come into the laboratory, for she often brought her father his lunch at noon.

He would have had liked his eldest son, who resembled him physically, to be keen of mind and aggressive and energetic like himself. The boy, however, turned out to be rather delicate and sickly. Sometimes he would put up a ten-foot pole and invite his own children and the neighbors' children to shinny up and win the coins he placed at the top. To the father's disappointment Tommy would always prove to be the weakest and the last at such games.

Edison's own father had been at best an indifferent sort of father, with little real understanding of his son. Of Thomas A. Edison his children recalled that he could be both warmly affectionate and playfully, unconsciously cruel, but that most of the time "he hardly ever saw us," or, "he never thought of us."

Unfortunately, his disappointment in his eldest son, and also in Willie, the younger one, revealed itself. Their upbringing, he may have felt, was not one of the best, possibly because

of Mary's habitual overindulgence with her children, or her own lack of education. Mary was also somewhat self-indulgent. She could spend whole afternoons idly chatting with a woman friend and consuming an entire box of chocolates. It was bad for Mary Edison's figure—she became tremendously stout—and bad for her health.

Though not unforgiving, Edison could show a fierce temper. His family knew these moods too. There was, no doubt, a normal amount of anger and grief and forgiveness in his life with Mary. Then suddenly, tragically, she was gone from him.

In the winter of 1883–1884 Edison, suffering from neuralgia, made a vacation journey to northern Florida with his wife and daughter. The climate of St. Augustine proved beneficial. Soon his mind was racing back to the problems of the central station system; he would fire off letters or telegrams by the hour to Insull, such as: "Don't forget to have Tomlinson [his attorney] draw up contract with the engineers"; or "Let me know how the new pressure indicator works."

After the journey to Florida, the Edisons returned to New York; a few months later, Mary and the children went back to the Menlo Park house, which was still used as their summer home. Edison then was much occupied by work in the city and remained there most of the time. In July Mary contracted typhoid fever, which at first did not alarm her family; but soon she was under the constant care of a doctor and her sister Alice. When suddenly she began to sink, Edison was called, and he hurried back from New York to her bedside. On the morning of August 9, 1884, his daughter Marion recalls, she was wakened by her father, who had been up all the night before. "I found him shaking with grief, weeping and sobbing so he could hardly tell me that mother had died in the night."

From that day forward, he rarely came back to Menlo Park; it was as if he hated the place. He was an agnostic, and so could find no solace in praying for Mary's soul. As was his wont, he buried himself in work, and thus stoically put out of mind the tragedy of his beautiful young wife. She was not yet thirty when she died.

With the passing of Mary, Edison's way of life seemed to undergo a marked change. At thirty-seven he was no longer a hell-for-leather, free-lance inventor, but a man of substance, heading a big industrial enterprise that increased his wealth year by year. He was, in fact, a millionaire. By force of circumstances he assumed an outlook that was more worldly than before. When, not long afterward, he fell in love and married again it was with a woman wholly different from his simple and touching Mary.

Four years after Edison had perfected his carbon filament lamp there were only twelve city stations, on the model of Pearl Street, in operation; in all America only 150,000 of his lamps were in use. Much more rapid progress had been made in selling isolated lighting plants for factories, stores, and hotels; by 1884 these numbered about two hundred. But all of it amounted to almost nothing compared with the huge gaslight industry which he had sworn to supplant. After the original Pearl Street station reached its full load limit, no more generators were added for several years; new business was simply turned away.

The trouble was obviously due to the extreme conservatism of Edison's financial backers. Henry Villard, who believed in the light, had overextended his railway holdings, was temporarily in financial difficulties, and unable to lend support; even Edison's old friend, Grosvenor Lowrey, had lately joined the conservative group.

How could Edison expand the business when others controlled its policy? And try as he would, he could not stir things up without the approval of the holding company which owned his lighting patents.

Nevertheless, in the autumn of 1885, in contrast with the preceding year of financial depression, business began to hum for the Edison electrical manufacturing companies. After moving to a large factory space, the lamp company steadily reduced the number of manual operations and the labor time required. From an initial cost of $1.21 per lamp, when manufacture was started in 1880, the company had lowered the production cost to about

thirty cents in 1885, when it turned out as many as 139,000 lamps. In the late eighties the company's output at last approached a million lamps annually, as Edison had prophesied in the beginning, and costs per unit were down to twenty-two cents.

By October 1, 1886, the combined Edison organization, with assets approaching ten million dollars, amounted to a big business for those days. More than five hundred of its isolated lighting plants were now in operation at various points throughout the country, using over 330,000 lamps. Central stations in large cities had risen from only twelve, in 1884, to a total of fifty-eight two years later. Similar facilities were being sold and installed in the great cities of Europe, South America, and Japan. Now revenues flowed from all over the world to the man who had created the practical incandescent lighting system. His affairs were now so prosperous that at last he could look forward to relinquishing most of his purely business cares to other hands and going back to his laboratory table.

Six months had passed since the death of Mary Edison; more and more the widower of thirty-eight felt the difficulty of his position. He was left with three motherless children whom he could not properly look after.

Marion, who attended a boarding school in New York, was nearest to him and much in his company during the wifeless interval. At thirteen she was almost full-grown, and went out with him a good deal to theaters, restaurants, or on Sunday carriage drives. "Why don't you come down to my shop to see me? You're not studying anyway," he would say, for he seemed lonely then. And she would leave her lessons and come to the machine works on the East Side, bringing him his favorite five-cent cigars.

The two boys, however, he saw much less of; Tom and Will, at this period, lived at Menlo Park with their Aunt Alice. Having formed strong prejudices against formal or academic education, Edison saw to it that his sons, as well as his daughter, had as little as possible of it. He would have liked the boys to acquire the training of a mechanic or an artisan, according to

their principles expounded in Rousseau's *Emile,* which he had read with approval. The results in the long run were not such as to have gratified either Rousseau or Edison. The sons by the first marriage now had no mother and knew their father very little.

In his friendships Edison was given to sudden personal enthusiasms. At times different favorites, like new satellites, revolved around his sun. Where his associate, Edward Johnson, had formerly reigned, the stout Ezra T. Gilliland, a onetime telegrapher whom Edison had first known years before in Cincinnati, now sat as the master's first "apostle." The diligent young Insull, too, had become more and more a confidant.

Though Ezra Gilliland often came to New York to work with Edison, his home was then in Boston, for he had some profitable business of his own in telegraph and telephone patents. His accomplished and beautiful wife presided gracefully over their home, which Edison visited often in the summer of 1885. One of the new friends he often saw at the Gillilands' was the handsome young lawyer named John Tomlinson, who soon became Edison's trusted personal attorney.

Under the civilizing influence of the Gillilands and Tomlinson the formerly unsocial man of the laboratories was found going out to buy a sixty-five-dollar coat (very dear then) and dressing for the evening. He who was always formerly so pressed for time now sat for hours on end in a drawing room with elegant but idle ladies and gentlemen, enjoying light talk, listening to music, and even playing parlor games! With his new friends he would also go off to one of Boston's old music halls and sit in the "bald-head row," enjoying a display of "the usual number of servant girls in tights."

What had become of Thomas Edison, the man who labored like a Titan? How could he pass whole days in such frivolous diversions? Was he corrupted, bewitched? Certainly the charm of the Gilliland home and its circle held him at this period and distracted his mind. The thought that for all his fortune he lacked such a home with its cheerful talk and laughter, and such a homemaker as its mistress to care for his children and

himself, was ever present in his mind. He was certainly one of America's most eligible widowers. At news of the death of his wife, scores of unknown ladies wrote him letters expressing their pity at his bereavement and freely offering him their hearts and their fortunes.

The Gillilands, evidently with the approval of Edison, now undertook to invite to their home a flock of marriageable females for the widower's inspection. By ones and twos they arrived in Boston from as far off as Ohio and Indiana and marched into the Gilliland parlor, while Edison examined them one after another. The game grew more and more engrossing, though Edison remained coy.

"Come to Boston," he wired Sam Insull. "At Gill's house there is lots of pretty girls." Finally there appeared a striking brunette from Ohio, whom Mrs. Gilliland knew well, and whose visit was carefully planned. She was Mina Miller, the daughter of Lewis Miller, of Akron, Ohio, a wealthy manufacturer of farm tools. Mr. Miller was well known as an active and philanthropic churchman, for he was a cofounder—with Bishop John Vincent of the Methodist Church—of the Chautauqua movement.

As was often the case in American families of recent fortune, Lewis Miller's daughter Mina was sent to a finishing school in Boston, and then, for further improvement, on the "grand tour" of Europe, whence she had lately returned. She is described as having been in her youth "accomplished and serious, with a liking for charity and Sunday school work"—but also a veritable belle, with an imposing figure, "rich black hair and great dazzling eyes."

The first meeting of Edison and Miss Miller took place in the early winter of 1885; by prearrangement the girl was visiting with Mrs. Gilliland when the inventor arrived from New York. The Gillilands had told him all about her.

Edison was talking to several men in the parlor, when Gilliland said to him, "Mina Miller is here and she is going to play and sing for you." The beautiful eighteen-year-old Miss Miller swept into the drawing room like a great lady, greeted the

famous inventor with dignity, and returned his gaze with the utmost composure.

On being asked to sing, she went at once to the piano and performed for the guests. She was far from being an accomplished musician, but what was impressive was the self-assurance with which Miss Miller did everything.

Edison, who was twice her age, on first exposure to Miss Miller felt, as he himself said, "staggered." Not long after meeting her he sent an urgent telegram to Insull, in New York, asking that two photographs of himself be sent to Miss Miller in Boston.

Later that winter, with his daughter Marion and the Gillilands, he went to Florida for a winter vacation. He would have returned North within a few days, but someone spoke to him of the tropical region of southwest Florida, of the Everglades and the Keys. Off he went, with his two friends and his daughter, for a journey of some four hundred miles on a rickety train.

After prowling about a sun-drenched scene of royal palms, mangoes, and giant tropical flowers for two days, he determined to take an option on a site of thirteen acres along the Caloosahatchee River near the village of Fort Myers and build a winter home there for himself.

Wherever he had been that season, he had spoken of the perfections of Mina Miller. So much so that, as he noticed, it made his daughter Marion fierce with jealousy.

In the Floridian jungle Edison had decided that he must marry Mina Miller, bring his bride there, and build not only a winter home but a new laboratory to be placed in that tropical setting. His diary shows him buzzing with romantic schemes for his castles in the Everglades.

On his return to New York in the spring of 1885, he found that the thought of Miss Miller permitted him no sleep. He wrote in his jocular manner, "Saw a lady who looked like Mina. Got thinking about Mina and came near being run over by a streetcar. If Mina interferes much more will have to take out an accident policy."

Determinedly he wooed the young lady "via the post office." Though he was uncommonly busy again that year with new lighting-plant installations and telegraphs for railroads and ships, he made prodigious efforts to see her. Her home was in Ohio; but in the summer the Millers regularly migrated to Jamestown, New York, to attend the Chautauqua gathering. Though Edison was "not much for religion," as he said, he determined to visit there in order to see her whom he now called "the Maid of Chautauqua."

Mr. Lewis Miller had been so long and closely associated with Bishop Vincent, the head of the Chautauqua movement, that their children had virtually grown up together. There was a rival suitor on hand, a younger man than Edison—the bishop's son, George Vincent, who was considered to be destined for Mina since boyhood.

But it was Edison who was at her side during a crowded steamer excursion on Lake Chautauqua. The throng surrounded them closely, they could not be alone; and he could not hear her save when he was very close to her. But the inventor was once more equal to the emergency. As he related:

> My later courtship was carried on by telegraph. I taught the lady of my heart the Morse code, and when she could both send and receive we got along much better than we could have with spoken words, by tapping our remarks to one another on our hands.

Soon afterward, he managed to take her out alone with him in a small rowboat. Mina Miller feigned resistance to her ardent lover for a while, though with steadily weakening resolve. He then gained her parents' consent to have her join him in a long excursion by carriage through the White Mountains of New Hampshire, the Gillilands acting as her chaperones, while his daughter also accompanied them. It was during this drive through the mountains that Marion saw her father tap out his proposal on Miss Miller's hand, as he too testified:

> I asked her in Morse code if she would marry me. The word "yes" is an easy one to send by telegraphic signals, and she sent it. If she had been obliged to speak she might have found it much harder.

Mina's consent was conditional upon her parents' approval. Therefore Edison, upon his return to New York on September 30, sent off a formal application for her hand to Mr. Miller. He had made his proposal after mature deliberation; and he declared in conclusion that he had learned to love Mina, and that his future happiness depended upon Mr. Miller's answer. The reply brought assurance of such happiness.

The news of Edison's forthcoming marriage to Mina Miller was soon out. In the autumn of 1885 the inventor was making extraordinary preparations for this new phase of his life. He was busy with plans for building a winter home in Fort Myers, Florida, and having lumber shipped for his projected laboratory. He was also engrossed in the purchase of a home magnificent enough for Mina, and for his own improved station in life. The simple house at Menlo Park was out of the question now. He had given her the option of living in a big town house in the city, or in the country, and she had expressed a preference for a country house.

On a day when the snow covered the ground he drove with her to West Orange to see a large estate. It was called Glenmont, and had been built on a high ridge by a former millionaire merchant of New York at the staggering cost of $200,000. It was a veritable castle of brick and wood in a style loosely called American Romantic, with spacious rooms, numerous outbuildings, greenhouses and broad, landscaped gardens. Glenmont apparently suited Miss Miller's ideas exactly.

All this, and the bride's jewels too, meant spending money like water, yet nothing daunted the inventor. Though not yet forty in 1886, he saw himself as one who was rising to the status of America's ruling industrial barons, one who stood at the head of a great industry he himself had created. Henceforth, all that he undertook must be planned on the grand scale. There

was to be not only the great mansion in suburban New Jersey but also a vastly enlarged new laboratory to replace Menlo Park, furnished with the finest equipment in the world, and to be situated on the acres he had purchased in West Orange, within a half mile of his future home and his new wife.

All northern Ohio seemed to be agog over the event, as Edison arrived there to be wedded to an acknowledged belle of the region. From the entrance of the big Miller house in Akron Mr. Miller rolled out a red carpet extending several hundred feet to a knoll on the grounds that overlooked the city. By every train crowds of guests arrived, the spanking Miller carriages with their high-stepping horses bearing them away swiftly to the Miller home.

The big front parlor was ablaze with flowers and resounded with the music of an orchestra; a whole corps of waiters had been brought from Chicago to serve the wedding lunch. The ceremony was performed under an arch of roses. Later that afternoon the couple drove around Akron, cheered by crowds, and had their picture taken before boarding the train for Florida in the early evening.

In April they came back from Florida and Edison brought Mina to their new home in West Orange, that sprawling, red-painted chateau over which the second Mrs. Edison was to reign for many years. In character Glenmont was similar to those spacious residences of mixed architectural styles erected by the new rich of the 1870's and 1880's. It had a porte cochere and a broad vestibule, vast living rooms, rich chandeliers, wide staircases, heavy red-damask-covered furniture, and masses of bad statuary, oil paintings, and bric-a-brac collected by its former owner. To Mina Edison this place was the appropriate setting for genius.

Some pains had been taken with Mina's upbringing so that she might be fit to play her part in good society. She was a young woman of undeniable strength of character and will, who entered upon the adventure of marriage with full awareness that her mate was one of the most noted of living men.

There was a good deal in her husband that she intended, nevertheless, to improve. Under her sway his rough exterior would be gradually smoothed, though it was a slow and difficult process. No power on earth could really turn this man into a tame parlor lion; to Mina's regret he continued to shun the kind of social life she would have enjoyed.

In his middle years the worker risen from the ranks of the poor was the lord of Glenmont and its handsome acres and possessed of a good and beautiful young wife of proper breeding. His ambitions nowadays bore a resemblance to those of the Carnegies and Rockefellers, the captains of industry who were his contemporaries.

To A. O. Tate, who became his private secretary after Insull's promotion to an executive post, he remarked, while gazing out of the windows of Glenmont, "Do you see that valley?"

"Yes, it's a beautiful valley," the other replied.

"Well, I'm going to make it more beautiful. I'm going to dot it with factories."

During the boom times of the late 1880's in America, the whole economy was growing at an unprecedented rate. Was there ever anything like the newly completed Brooklyn Bridge, or the young skyscrapers in Chicago, or Mr. Carnegie's steelworks in Pittsburgh? Like a good American Mr. Edison, too, felt the urge to do things on a truly continental scale.

At this period, in 1886, the Edison Machine Works was moved from its location in New York City to vastly larger quarters at Schenectady, New York. The great presses and machine tools were transported to Schenectady, and within a year all the Edison generator, motor, tubing, and insulation work was being carried on there by some eight hundred hired hands. The Schenectady works grew with the rapidity of a Western boomtown, until they fairly overflowed with busy artisans and machines of every kind.

The next year there was the new laboratory to be built at a site in West Orange's quiet Main Street, a half mile from Edison's new home. The laboratory buildings, when completed,

aggregated ten times the size of the humble establishment at Menlo Park. They constituted then the largest and most complete private research laboratory in the world.

The main brick building, 250 feet long and three stories high, contained large machine shops, an engine room, glass-blowing and pumping rooms, chemical and photographic departments, rooms for electrical testing, stockrooms, and in its main wing a spacious office and library. The library contained ten thousand volumes, and with its glass cases of minerals and chemicals was a museum and sample room as well.

A staff of forty-five to sixty persons assisted the inventor at West Orange. They ranged from scientific specialists down to draftsmen, mechanical assistants, and unskilled laborers. Edison still kept a tight reign on everything being done in his laboratory, but inevitably the work had to be departmentalized. At Menlo Park he was able to see at a glance what every one of his dozen assistants was doing in the one long room. Now, every morning after going through his mail, he would have the men in charge of different experiments come into the library one by one and report on the work in progress. He was always able to shift his attention quickly from one line of investigation to another, asking questions, giving instructions, and making decisions rapidly. It was also his habit, at least once a day, to make a tour of the different departments and with his own eyes study the work being done.

His own passion for experimentation never flagged. From conferences with his assistants he often would escape to an upper room of the main building, a sparsely furnished place littered with instruments and materials. Here he would remain, engaged in lengthy studies of the favorite subject of the moment.

One of his major preoccupations in the spring of 1887 was with renewed experimental work on his own phonograph. For nearly ten years the primitive tinfoil phonograph had remained only a scientific toy, now forgotten even by the entertainment parlors and country fairs that had once exhibited it. However, he had learned some months earlier that rival inventors work-

ing at the laboratory recently established by Alexander Bell were busily improving his phonograph and had been awarded patents for their innovations. He vowed he would not bother to sue his adversaries, but would *ruin* them—by making a better machine.

Thus, after having neglected his paternal duties toward his "baby," the phonograph, owing to the pressure of larger affairs, Edison went back to his laboratory table again. For most of two years, experiment with the phonograph was given priority in the laboratory over many other affairs claiming his attention. And he was happier thus, as the engineers phrase it, with "his belly at the drawing table again."

In the many clauses of his basic phonograph patent of 1878 Edison had enumerated various materials that could be used for records, waxed substances among them. As a substitute for the old tinfoil sheet, whose impressions were faint and easily effaced, he now devised a hollow cylinder of a prepared wax compound, with walls about a quarter of an inch thick. Wax permitted closer grooving. In place of the old recording needle Edison introduced a much harder cutting tool, a somewhat blunt sapphire stylus; he then devised an ingenious "floating weight" to replace the crude adjustment screws holding the needle in place.

In testing results on the improved phonograph Edison had the great problem of trying to hear distinctly despite his deafness, which was total in his left ear. He would place his right ear—whose hearing was limited—in contact with the instrument itself; or at times he would bite into the horn with his teeth, thus permitting the sound vibrations to be carried through the bones of his head to his hearing nerve. "It takes a deaf man to hear," he would say grimly.

The laboratory notebooks show him compiling a long list of "complaints" against his evolving phonograph:

> Crackling sounds in addition to continuous scraping due, either to blow-holes, or particles of wax not brushed off—poor recording—uneven tracking—

dulling of the recorder point—breaking of glass diaphragm—knocking sound: chips in wax cylinder—humming sound, due to motor.

In painstaking fashion Edison worked to eliminate these defects one by one, inventing various new stratagems and devices by which the first simple talking machine became more responsive and lifelike. Though, in his judgment, the principal use of the phonograph would be as a business machine, for dictating letters, he tested his apparatus by making records of famous musical artists. The boy prodigy, Josef Hofmann, then twelve, came and played the piano. After him came Hans von Bülow, the most famous pianist of his era, to perform a Chopin mazurka and to listen through the tubes as it was played back.

Henry M. Stanley, the journalist of African fame, a sternly religious little man whom God had brought safely through the jungle, also visited the Edison Laboratory about this time and spoke a few grave words into the talking machine. Then he turned to the inventor and said, "Mr. Edison, if it were possible for you to hear the voice of any man known in history, whose voice would you prefer to hear?"

"Napoleon's," replied Edison without hesitation.

"No, no, I should like to hear the voice of our Savior," said Stanley.

"Oh, well," laughed Edison, "you know, I like a hustler!"

On May 31, 1888, at a time when the inventor was still overborne by the problem of the new phonograph, excitement of a different sort centered at Glenmont, for on that day the first of the three children Edison was to have by his second wife was born. It was a girl and was named Madeleine. Edison had interrupted his work to await the arrival of the child, remained for a time at his wife's bedside, then hurried back to his laboratory. A few days later he had gone into all-night sessions with his assistants, locked within the laboratory in what the newspapers called an "orgy of toil." The Edison team was making its last wild charge upon the sound-producing problems of the

phonograph. On the morning of June 16, 1888, they emerged to announce success.

By now Mina Edison was more fully aware of what kind of great man she had married. Accustomed to a cheerful home and to a busy social life, she must now spend her days and nights much alone in the big mansion on the hill at Llewellyn Park. There were few diversions, no games, and almost never any social gatherings here. The children by Edison's first marriage did not enjoy staying at Glenmont. Marion, only a few years younger than her stepmother, attended boarding school or traveled in Europe with a governess. The two boys after a while spent much of their time in the home of their aunt, Alice Holzer, at Menlo Park, or at the farm of their uncle, Pitt Edison, in Michigan, when they were not away at school.

As Mina Edison said in later years, the conditions of her marriage constituted a great challenge. With her deep sense of duty she recognized that her husband's career always came first. Such efforts as she made to control him soon found their limits, for as he had once said, no woman could ever "manage" him. Evening after evening she would wait in vain for him to come home to dinner, then send him some warm food by the coachman. She was loyal, and he, despite his teasing habit, was most affectionate with her. But when they were grown old, she did not shrink from admitting publicly that he was "difficult."

Around the time of the coming of the new daughter and the new phonograph, Colonel George Gouraud, Edison's English impresario, arrived in West Orange for a business conference with the inventor. Shortly after he returned to London, he received from Edison, in place of the letter or cablegram he had expected, a dictated "phonogram" reporting with great satisfaction the safe arrival of both "babies."

At his offices in London, Gouraud gave demonstrations of the new apparatus that made a tremendous impression. These would begin with an introductory speech by Edison himself followed by records giving the silvery voice of Mr. William Gladstone, the Prime Minister; of Robert Browning reciting his verses; and of Sir Arthur Sullivan who was "terrified at the

thought that so much hideous and bad music may be put on record forever."

Edison said, "I don't want the phonograph sold for amusement purposes. It is not a toy. I want it sold for business purposes only." Nevertheless it was the entertainment side of his invention that the world wanted most. A few years later it would be introduced into popular nickelodeons as a coin-in-the-slot machine, grinding out light music and comic dialogues for the multitudes. The brass bands, the music-hall tenors and sopranos resounding in thousands of the tinny 1888 models pointed the way to the future role of the phonograph as purveyor of music to the masses.

In the winter and spring of 1889 he had felt more tired than ever before. His young wife, attempting to minister to his health, tried for a long time to persuade him to rest. Then at last, to her great delight, he agreed to take a long holiday and go to Europe with her.

The vacation trip turned into a triumphal tour. They sailed on the French liner *La Bourgogne,* their first destination being Paris. Edison was to visit the great Universal Exposition in France, see the new Eiffel Tower and all the contrivances of the nineteenth-century inventors, including his own electrical, telegraph, telephone, and phonograph inventions.

On their arrival at the dock in Le Havre an official delegation representing the French Republic was on hand to meet them; reporters from newspapers of many European countries were there to interview them, and crowds cheered them on their way to the train. In Paris there were more and bigger crowds, and more government dignitaries to bid them welcome.

A crew of Edison men had arrived several months earlier to prepare a display of Edison products that covered a whole acre of the fairgrounds. Here a complete central lighting station had been erected, and was surmounted by a brilliant electric sign, made up of colored bulbs representing the flags of both France and the United States. But the longest lines of people, an esti-

mated thirty thousand, were drawn to the new phonographs, which ranked second only to the Eiffel Tower as an attraction.

During the ten days in Paris the American inventor, with his big head, expressive features, and youthful bearing, became familiar to the people in the streets, who besieged the entrance of his hotel in the Place Vendôme to see him. At the opera house, as he entered a box—the guest of the President of the Republic—the orchestra played "The Star-Spangled Banner," while the audience cheered and called on him to speak. He seemed overcome with emotion, merely rose to his feet, bowed, and sat down.

Marion Edison, who had been studying at Geneva, joined her parents in Paris. She recalls that her father disliked the crowds and social life, but that her stepmother apparently could never have her fill of them. "Oh, they make me sick to my stomach!" Edison would exclaim on returning from those long dinners.

It was plain that the youthful Mrs. Edison and her high-spirited stepdaughter of seventeen agreed in "everything save their opinions." Marion was clearly "jealous" of the beautiful young woman who had taken not only her mother's place but, as she may have felt, her own place as well in her father's affections.

From Paris the Edison party went on to Berlin, and then late in September they arrived in London. They tycoons of the electrical industry were most eager to talk with Edison and entertain him in their big country houses, and in London he inspected the Edison central station at Holborn Viaduct.

On the return voyage, Edison was thoroughly relaxed. Immediately on his arrival in New York he hurriedly crossed the harbor in a launch to the Jersey shore, then rode by carriage to the laboratory at West Orange. He was burning to know the results of certain secret experiments that had been going on during his absence behind the locked door of Room 5. But Batchelor and another assistant, a young Englishman named W. K. L. Dickson, had meanwhile put up a small new building in the laboratory compound for these new purposes. Proudly

Dickson showed his chief into the studio and prepared to demonstrate what had been accomplished, in accordance with Edison's instructions, during his stay in Europe.

Edison sat down; the big room was darkened; Dickson went to a bulky apparatus at the back of the room that resembled a large optical lantern. Next to it, and attached to it, was a phonograph. Against the wall, facing Edison, there was a projection screen. Dickson turned a crank, and a vague flickering image of Dickson himself "stepped out on the screen, raised his hat and smiled, while uttering the words of greeting: 'Good morning, Mr. Edison, glad to see you back. I hope you are satisfied with the *Kineto-phogograph*.' "

The development of the first operable motion-picture camera—invented but not yet patented by Edison—was well under way. Connected with it, though rather rudely synchronized, was a model of his improved phonograph. Thus the first motion pictures were not silent, but were talking pictures.

SEVEN

Dollars and Science

Edison would have loved to pursue his fascinating experiments in the motion picture with undivided attention, but the work advanced far more slowly than his earlier inventions. "Dollars and science were so mixed up" in his career, as he himself suggested. And at this point commercial ventures took precedence over inventive activities.

By 1888 Edison was actually one of America's ranking industrialists, employing between two thousand and three thousand workers. With so many on his payroll, he could not escape labor troubles.

In his relations with his workers he had the attitude of the old-fashioned entrepreneur. Since he himself was content to work eighteen hours a day, he reasoned that his hired hands should be willing to hustle for eleven hours. But the period of 1884 to 1887 was a time of marked labor unrest, when nearly one million workers entered the ranks of labor to fight for the union shop, the ten-hour day, and higher wages.

Edison paid average wages, plus incentive payments for extra effort, but he could never abide labor unions. As a small employer of a few dozen men, he had made his men like him and had known how to keep them interested in the work. Nowadays the factory system's division of labor characterized his electrical shops, where hundreds of workers were employed and no man made more than a fraction of any product.

Moreover, Edison and Insull, his financial lieutenant, were carrying fearful burdens. They had enormous orders and great difficulty in meeting payrolls and buying supplies, for rapid expansion left them short of capital. The company lawyer now remarked, "The danger is not that we won't have enough business, but won't be able to grow fast enough to handle it."

By 1888 the largest of the Edison manufacturing companies, the machine works at Schenectady, was so busy that it was reported the workers were literally standing on one another's feet. Competition from "patent pirates" in the electrical manufacturing field was a growing threat. Patent infringement suits filed by Edison's lawyers took years to drag through the courts, while every electrical company in America "jumped the Edison claims." The need for reorganization was urgent; the need for fresh capital was even more urgent.

Some effort had already been made to coordinate the selling and installation of lighting plants for the three companies that were making their main components—Edison Lamp, Edison Machine Works, and Bergmann's. But this manufacturing group was in constant friction with the parent company, Edison Electric Light, which held the Edison patents and licensed them to local light and power companies.

Henry Villard, now making his financial comeback, had perceived the difficulties the Edison industries encountered in their expansion. For two years he had been maturing a plan for a grand consolidation. His scheme was to buy in the "electrical shops" at a fair value. Knowing that he could not operate without the support of the Morgan group, which controlled the parent company, he sought to combine forces with them. In the spring of 1888 he then proposed the amalgamation of the several companies as the Edison General Electric Company.

While Edison was working to build up his manufacturing organization he had often been obsessed by the fear that he might be forced into bankruptcy. The necessity of meeting a weekly payroll for more than two thousand workers, week by week, harrowed his mind. At times "he was embarrassed in get-

ting enough money to pay even for his household expenses." The proposals of Villard and his syndicate "to buy out the shops" were therefore received by Edison with a deep sense of relief from intolerable burdens.

After a good deal of haggling, Villard worked out a final agreement by which the Edison Electric Light Company was to be taken into the combination to be known as the Edison General Electric Company. The new company was described in the metropolitan press as one of the biggest consolidations ever carried out under the laws of New Jersey and as constituting an "electrical trust." After the whole deal was completed, Villard was elected president of Edison G.E.

Edison, owning a minority share of about ten percent of the stock, still was regarded as the company's inventive brain; he was also one of its directors. He had, nevertheless, little to say about its actual management. The improved incandescent lamp, for example, after 1888 was constructed with a cellulose filament, but showed uneven qualities because of the imperfect producing methods. Edison would have liked to hunt down the "bugs." But now, it seems, it was necessary that he *ask permission* of his lamp factory's management before he could send an inspector into the plant who would report to him directly.

Edison now felt himself only a cog in a gigantic corporate machine. More significantly, perhaps, he was stubbornly opposed to one of the newest and most promising developments in the electrical field—the alternating-current generators and transformers that George Westinghouse and others among his competitors in America and Europe were then introducing. The a-c system, successfully applied, would make it possible to send high-voltage currents over long-distance transmission lines for many miles, and cheaply, and then, with the a-c transformer, step them down again to low voltages at the point of consumption. (With Edison's low-voltage direct-current system, transmission distance was limited to two miles.) Thus, it would eventually be feasible, with the a-c system, to place hydroelectric plants or steam generating plants at favorable locations for waterpower or coal supply. Younger engineers were dreaming

already of harnessing the power of Niagara Falls and producing electrical energy in immense volume.

But Edison, back in 1880, had firmly opted for direct current at 110 volts as the safest form of electrical distribution—all the way from the powerhouse to the ultimate consumer. Now, claiming that the new high-voltage a-c system would destroy the reputation for safety he had tried to build up for his industry, he bitterly denounced all a-c advocates.

When President Villard of Edison G.E. sent Edison a German scientific article reporting advances in a-c systems in Switzerland and Germany, Edison replied, "The use of alternating current instead of direct current is unworthy of practical men."

It was perhaps Edison's greatest blunder (as he himself would admit twenty years afterward). He seemingly closed his mind and would go no further, resisting a-c systems much as the big gaslight companies earlier had rejected his incandescent electric light. "In 1879 Edison was a bold and courageous innovator," a modern commentator has said. "In 1889 he was a cautious and conservative defender of the status quo."

One of his chief competitors, the Thomson-Houston Company of Lynn, Massachusetts, had meanwhile obtained valuable transformer patents, developed "alternators," and, in competition with Westinghouse Company, began to sell power on high-voltage lines. Moreover, whispers of an approaching coalition with one or the other of these big rivals began to spread. If they were true, he remarked to Villard,

> . . . then it is clear that my usefulness is gone. . . . Viewing it from this light you will see how impossible it is for me to spur my mind, under the shadow of possible future affiliations with competitors, to be entered into for financial reasons. . . .

The restless Edison now panted for new subjects to which he could apply his unique inventive talents, without the weight of a large organization bearing down upon him. It seemed to

him that to "play" with his secret "kinetographic camera" or his improved phonograph, or that elephantine machine he had lately designed for the magnetic separation of iron ore would be an endless delight to his mind.

"Electric lights are too old for me," he remarked jocularly at this period. It was no mere jest.

One day, early in 1892, according to his private secretary, Edison was brooding in his library when a laboratory assistant came in and made some inquiry about electrical matters, to which he replied frankly that he did not know the answer. Brusquely he added that his scientific adviser, Dr. Arthur Kennelly, should be consulted. "He knows far more about [electricity] than I do. In fact, I've come to the conclusion that I never did know anything about it." His words were tinged with deep bitterness.

By the autumn of 1891 secret conferences about another big merger between Edison G.E. and Thomson-Houston Company finally approached their decisive phase. Edison G.E. was thus sold over the inventor's head. The new company, eventually to become one of the world's largest corporations, was to be called simply the General Electric Company, and the name of Edison was thus to be removed from its banner. He was known as the "father of electric lighting"; his name had been a great trade name. That it should now be removed from the title of the organization he had founded seemed not only unduly hard but ungrateful.

Up to the last hour, Edison hoped that the Edison Lamp Company would be treated differently from the other units and be kept under his control. But news of the transfer of all the Edison manufacturing units to the new company, without exception, suddenly reached him from a New York newspaper office in advance of its publication.

"I had never before seen him change color," his secretary, Tate, said afterward. "His complexion was naturally pale, but following my announcement it turned white as my collar."

MR. EDISON FROZEN OUT HE WAS NOT PRACTICAL ENOUGH FOR THE WAYS OF WALL STREET ran the headlines of a leading New

York daily. He remained silent about what had happened; but he issued a brief public denial that he had been "mistreated" or "gulled." In reality, he had begun to retire from his company in 1889, when he reduced his ownership of its stock to about ten percent. After 1892, he unwisely sold the rest of it. He was elected a director of the General Electric Company; but he hardly ever attended any of its board meetings and soon resigned. Tate wrote:

> Something had died in Edison's heart. . . . He had a deep-seated, enduring pride in his name. And this name had been violated, torn from the title of the great industry created by his genius. . . .

One day, several weeks after the merger of the two companies into the General Electric "trust" had taken place, Edison, speaking with a companion, declared that he was done forever with electric lighting. "I am going to do something now," he said, "so different and so much bigger than anything I've ever done before that people will forget my name ever was connected with anything electrical."

In the final decade of the nineteenth century two more sons were born to Edison: Charles, in 1890, a handsome infant who resembled his father; and Theodore, who came into the world in 1898. Edison's own father, Samuel Edison, died in 1896 at the ripe old age of ninety-two. Meanwhile, Tom junior, the eldest son, pursued an erratic career; he made an unfortunate marriage, and got into financial straits from which he had to be rescued with the aid of papa's checkbook. Finally, the large athletic Will, during the Spanish-American War, at twenty years of age, enlisted for service and came down with yellow fever. It all sounded like the lot of joy and sorrow befalling the average American family. But during all those years the baby that gave Edison the greatest concern was the "Ogden Baby"—his enterprise for separating ore magnetically, developed near the site of the old Ogden mines in Ogdensburg, New Jersey.

Edison gave at least five years of his life over the decade between 1890 and 1900 to a struggle to develop this invention from which he hoped to win a commanding position in the country's vital iron and steel trade. Iron ore was growing scarce; he thought his new ore-milling process would recapture economically the pure iron of exhausted mines in the Appalachian region. He sank about two million dollars in this venture, and his company went in debt to the tune of several thousands more.

But while he labored to develop his magnetic ore separator, fabulous high-grade iron deposits, enough for most of America's needs over the next sixty years, were discovered in the Mesabi Range in Minnesota. Accordingly, in the late 1890's the price of iron dropped from $4.00 to $2.65 a ton.

On hearing this, Edison burst out laughing, "Well, we might as well blow the whistle and close up shop," he exclaimed.

It was an unmitigated disaster, the worst he had ever faced; he had lost not only years but the entire fortune accumulated by his inventive labors. Yesterday a millionaire several times over, today he was "busted."

One day in 1899 he returned to the mills to order the dismantling and disposal of the machinery. Where another might have been in a state of despair, he discussed his situation in the most jovial spirit. Though now fifty-three he remarked gaily enough that he could always find a job as a telegrapher at seventy-five dollars a month. Then, in more serious vein, he remarked that he had already arranged to put all that costly equipment, and the technical knowledge he had gained, to good use: the establishment of a modern portland cement works according to his own design.

He hoped in this way to settle the debts of about $300,000 the ore-milling concern was left with, adding: "No company I was ever connected with has ever failed to pay off its creditors." It was like him to waste not a moment in vain regrets, to forget the defeat, and with coldly rational courage apply himself at once to new undertakings.

About a year or two after they had dismantled the Ogdensburg ore-milling plant, Walter S. Mallory, his plant superintendent, happened to call his attention to newspaper articles of the current boom in Wall Street, during which General Electric stock had risen to $330 a share. Edison asked, "If I hadn't sold any of mine what would it be worth today?"

After some calculation Mallory replied, "About four and a quarter million dollars."

Edison was silent for a moment, plucking at his right eyebrow, then looked up, smiled broadly, and said, "Well, it's all gone, but we had a hell of a good time spending it!"

At certain periods, after having been much away from his laboratory, Edison would say, "I am tired of *industrial science,*" and would promise to "rest himself" by taking up "pure science." Nature, he said, was often full of surprises, and it was fun to come upon them unexpectedly. In his laboratory notebooks there were observations of hundreds of curious, unexplained phenomena.

In November 1895 came the remarkable discovery by Professor W. K. Roentgen, the Netherlands physicist, of the so-called X rays emanating from a cathode tube. Their radiations could pass through the flesh and muscle tissue (though not the bones) of living animals and so make a shadow picture of the bones on a photographic plate. The value of such an instrument for surgery was grasped at once; soon many investigators were at work devising fluoroscopes, Edison one of the first among them.

Professor Michael Pupin, of Columbia University, appealed to him for help in discovering the most effective fluoroscopic chemicals. During a lull in activities at the ore mill, Edison went back to his laboratory and with his assistants tested crystals made out of about eight thousand different chemical combinations. Within a few weeks he sent the Columbia University scientist a fluoroscope with a tungstate-of-calcium screen—with which Pupin was enabled to make a clear shadowgraph of a man's hand that was filled with shotgun pellets. Guided by the

Edison fluoroscope a surgeon promptly performed the first X-ray operation in America, with complete success.

Soon after, Edison was working up a variety of X-ray tubes and donating a number of them to hospitals where surgeons had quickly taken up the new X-ray techniques.

Other scientific "distractions" were provided by intermittent development work on the phonograph, but surpassing all these activities in interest for Edison was his secret "toy," the motion-picture camera.

Our last glimpse of the motion-picture camera was in the locked room at Orange, when Edison had returned in October 1889 from his triumphs at the Paris exposition, to be shown by his assistants a "kineto-phonograph" that actually functioned. This balky and jerky kinetic camera was both intriguing and difficult; he could see no practical commercial future for it and yet could not bring himself to drop it.

For a century or more men had used a variety of mechanical tricks with pictures—usually a series of drawings or photographs of objects in successive stages of movement—to create the illusion of pictures in motion. Such pioneering efforts using the scientific phenomenon of persistence of vision set the stage, so to speak, for Edison.

He had set himself the further problem of recording movements in a continuous stream, and showing or projecting them. He began with a fairly visual idea of the kind of mechanism he would use. This is clearly shown by he document he wrote—October 8, 1888—to describe such an apparatus:

> I am experimenting upon an instrument which does for the eye what the phonograph does for the ear, which is the recording and reproduction of things in motion, and in such form as to be both cheap, practical and convenient. This apparatus I call a Kinetoscope, "moving view." . . . The invention consists in photographing continuously a series of pictures occurring at intervals

> . . . and photographing these series of pictures in a continuous spiral on a cylinder or plate in the same manner as sound is recorded on a phonograph.

He goes on to explain that when the picture was taken, the cylinder would be held at rest; then it would be rotated for a single step, halted again, and another exposure made. He remarks significantly enough, "A continuous strip could be used, but there are many mechanical difficulties in the way."

Edison himself overcame the many mechanical difficulties he had foreseen at the time. By the spring of 1889 he and his assistants had abandoned the photographically sensitized plaster cylinder and were experimenting with the recently created transparent celluloid film. These heavy sheets of celluloid coated with a photographic emulsion were cut into narrow strips, cemented together end to end, and fed across the focal plane of the camera.

Then came news that George Eastman of Rochester, New York, the inventor of the "Kodak," had improved celluloid film, making it tougher, yet light and flexible. Soon Eastman was producing strips of his new improved film for Edison's special use in rolls of fifty feet.

It was the summer of 1889, shortly before he was obliged to leave for Paris, that Edison designed a camera mechanism for advancing, or feeding, the roll of film forward at a given rate of speed, using perforations on one side of the film which were engaged by a sprocket wheel attached to a main shaft revolved by hand or motor. And it was with this machine, during Edison's absence, that his assistants managed to complete pictures lasting twelve seconds which W. K. L. Dickson showed to him on his return. After his motion-picture invention became known to the public, everyone exclaimed over the *simplicity* of his apparatus—the strip-film kinetograph which solved both basic problems of the motion-picture art: taking pictures of motion and exhibiting them.

Edison's first intention was to make sound pictures; he would synchronize the movement of the reel of film with a

phonograph driven by the same motor powering the camera. There was to be singing or music accompanying a dance, or the sound of a voice as the film unrolled. "The establishment of harmonious relations between kinetoscope and phonograph," Dickson wrote later, "was a harrowing experience, and would have broken the spirit of inventors less inured to hardship and discouragement than Edison."

With the thought of making the apparatus "commercial," he also devised a peep-show mechanism for exhibiting positive prints made from his kinetograph negatives, which he named the Kinetoscope. This consisted of a cabinet of substantial size with an eyepiece through which pictures on moving strips of film could be viewed.

In the year that followed, Edison had his assistants build a better and larger motion-picture camera. This ponderous machine, which was in use between 1890 and 1894, is the true father of all modern motion-picture cameras. The width of its film, 35 millimeters, is still standard today.

At this period of his life, in middle age, Edison worked much more slowly at his inventive tasks than in the past. Several different experimental projects were generally going forward at the same time. Four men, for example, worked on the motion-picture job in the early stages, while it was still more or less a secret. Edison was just then leaving the electrical manufacturing industry, was experiencing much difficulty with the phonograph business, and was already deeply involved in his nerve-wracking ore-separating work.

Thus he did not even file for a patent on his basic 1889 kinetograph and Kinetoscope until the end of July 1891, and those patent applications were, as it happened, incomplete and faulty. Two of his photographic assistants, not long afterward, left his employ to work for others who entered into competition with Edison in the new industry created by his invention. These competitors fought him in the courts to contest his patent claims.

He committed another and even more costly error by failing to take out foreign patent applications for his motion-

picture camera in England and Europe. As a matter of routine his lawyer advised him to file for such foreign patents. But when told that it would cost $150, he is reported to have rejected the proposal, saying casually, "It's isn't worth it."

These two legal errors opened the door wide to competition by many rival inventors, borrowers, infringers, and plain pirates. Once a model or even a drawing of Edison's motion-picture camera was available in Europe, anyone could imitate it and have it patented in his own name and offered in the United States market as well as that of Europe. In short, his work on the motion-picture camera was more disputed and disparaged than almost anything he ever did.

After having neglected the motion-picture invention—in favor of low-grade iron ore and the phonograph—Edison's interest in the affair finally began to grow. By February 1, 1893, a strange building, dedicated to the new art, had appeared within the Edison Laboratory compound. It was something the like of which had never before been seen: a wooden structure of irregular oblong shape, with a sharply sloping roof hinged at one edge so that half of it could be raised to admit sunlight. The whole building, fifty feet in length, was mounted on a pivot, like a revolving bridge, and could be swung around slowly to follow the changing position of the sun and admit its full glare to the interior. The walls of this jerry-built affair were covered with black tar paper; a stage at one end of the single large room was also draped in black, so that the whole decor was funereal in the extreme. Such was the first building constructed especially as a *motion-picture studio,* officially called the Kinetographic Theater, but affectionately referred to by its staff as the Black Maria.

In this somber edifice a spate of pygmy motion pictures was ground out in 1893 and 1894. The performing artists strutted for a brief moment of glory—the shorts ran about a minute and a fraction—in the full glare of that sunlit stage, against a background so dark that the pictures were quite sharply defined. Among the early performers was "Gentleman Jim" Corbett,

pugilistic idol of America, who provided a realistic exhibition of his art; the famous strong man Sandow; Japanese dancers; "Buffalo Bill," with accompanying Indians, recording a first Western; also acrobats, knife throwers, and diverse fowl recruited for cockfights.

In one of his frivolous moments Edison went off to Daly's Theatre in New York and persuaded its celebrated Gaiety Girls to come to his studio and dance before his kinetograph. After such efforts it was an easy step to film short comedy skits from the vaudeville stage, as well as picturesque renditions of an organ-grinder performing with his monkey, or of a patient in a dental parlor reacting to treatment with laughing gas.

The camera's eye was also pointed outside the windows of the Edison Laboratory to take realistic views of everyday life along Valley Road, West Orange. These might be called the first documentaries. Then one day the quiet of West Orange was shattered by the thunder of battle, as uniformed horsemen, simulating the British and the Boers in Africa, went charging over the empty lots outside the laboratory—to the vast amusement of the eternal American boy in Thomas A. Edison.

For several years, Edison's efforts to interest capitalists in promoting his new machine had been in vain. Edison's former Wall Street friends, such as Villard, would not go near his motion-picture invention; even Edison himself at the outset seemed a bit ashamed of its apparently delinquent character. Then, early in 1894, Thomas Lombard, who promoted the sale of coin-machine phonographs for Edison and had long seen commercial promise in the queer little peep-show box, turned up with a young capitalist named Norman C. Raff.

Raff, recently arrived in the East from gold-prospecting exploits in the Rockies, and his associate, Frank Gammon, whom he soon introduced, were speculators, backers of racetrack entries or theatrical shows. They saw the skits and prizefights, and in 1894, after organizing the Kinetoscope Company, entered into a contract with Edison to purchase a large number of his peep-show boxes for two hundred dollars each and exhibit them in Kinetoscope parlors.

The first of these parlors was opened on lower Broadway in New York, on April 14, 1894, and was billed as "The Wizard's Latest Invention." The first public showing created something like a riot. Crowds on Broadway waited all day and far into the night in long queues to see the pictures that moved for ninety seconds, through the eyeholes of five Kinetoscopes. Soon there were similar parlors opened in Chicago, Baltimore, Atlantic City, San Francisco, and other centers, which were also besieged by crowds. The exploitation of the motion picture was thus begun as a form of mass entertainment, following the commercial pattern of the earlier phonograph parlors.

Two years later, in 1896, following the development by Thomas Armat of Washington, D.C., of a successful projector (the vitascope) which was combined with the Edison motion-picture camera, preparations were made to open theaters with wall screens. The formal public presentation of the "enlarged Kinetoscope" took place on the night of April 23, at Koster & Bial's fashionable Music Hall on Herald Square, before a silk-hatted audience embracing many leading figures in the theatrical and business world. The presentation included ballet girls dancing with umbrellas, burlesque boxers, some vaudeville skits, and finally so realistic a scene of waves crashing upon a beach and stone pier that some of the viewers in the front row recoiled in fear. The audience was astonished and exhilarated by this newest "miracle of science," and sent up great cheers for Edison.

This event signalized the introduction of living pictures to the theaters of Broadway, and thereby to all the world. But the impact that this new entertainment medium was to have upon the minds and lives of hundreds of millions throughout the world was something unforeseen and unimagined—perhaps surpassing the effect of almost all other nineteenth-century inventions, by Edison or anyone else.

In the late nineties, after he had severed his connections with the General Electric Company, Edison had been on the verge of financial ruin, thanks to the failure of his ore-separating venture. In 1898, in response to a kindly letter from Henry

Villard inquiring if he needed help, he had written cheerfully that he hoped to be able to clear off the debts he had incurred. "My three companies, the Phonograph Works, the National Phonograph Company, and the Edison Manufacturing Company (making motion-picture machines and films) are making great amount of money, which gives me a large income." At that time he was still pouring his revenues into the ore-milling works.

But soon after he gave up that stubborn campaign, he was in the black again! Edison cared nothing for mere money, as against the joy of a new battle to wrest from nature more of her secrets—but he could always earn his way. By his wits, with that help of his ingenious Kinetoscope, and a few other tricks, he had saved himself again. With his recent winnings he could now afford to "plunge" into a new, a different, and a very hazardous experimental project.

EIGHT

A Stern Chase: the Storage Battery

The Automobile Age had begun. In light coupés or phaetons, powered by steam and gasoline engines or electric motors, some three thousand Americans were already "burning up the roads." The first steam cars and gas buggies were noisy, hot, and bothersome; they stank and gave much trouble mechanically; yet every year they gained in following.

Edison tried the early gas buggies and steamers, and allowed that the horse was doomed; the future would belong to self-propelled carriages and trucks. He also ventured to predict that most of them would be driven by electric motors and storage batteries.

Why electric cars? A survey made in New York at the end of 1899 showed that of a hundred motorcabs in use in the downtown area, ninety were powered by storage batteries. Compared with cars using steam engines, which were heavy, or gas engines, then most unreliable, the electric runabout was clean, light, and quiet. Carriage builders were installing lead batteries and small motors in Studebaker or Columbia vehicles. But who knew as much as Edison about electrical machines? It was the right time, he judged, to enter this field and contrive a product more practical than any other.

A few years earlier, at a gathering of members of the Association of Edison Illuminating Companies, Edison met by

chance a thin, long-legged young man with pale blue eyes, named Henry Ford. Ford was then employed as chief engineer at the Detroit Edison Company's powerhouse, and had been introduced to Edison by the head of that company, Alexander Dow. "There's a young fellow," said Dow, "who has made a *gas* car."

For long years Henry Ford had fairly worshipped Thomas A. Edison as the greatest of inventors, the example whom he desired to emulate. Now he was invited to sit next to this great man. He was shy, and usually dull in conversation. But when asked to describe his first automobile model, the young engineer became animated.

Edison, cupping his ear, listened and was impressed. He brought his fist down upon the table and said, "Young man, that's the thing! You have it—the self-contained unit carrying its own fuel with it. Keep at it!"

Ford went back to his machine shop in Detroit filled with inspiration; he would soon leave the Detroit Edison Company plant, find some financial backers, and in 1899 launch his first small automobile manufacturing concern. Though they did not meet again for several years, Ford believed that this first encounter was a turning point for him; his gratitude toward Edison endured and became something like idolatry.

In looking at the problem of the horseless carriage in 1900 Edison had concluded that the gasoline engine was "unscientific" and wasteful compared with the electric motor. But the batteries available as motive power also were inefficient, and the corrosion of metal by acid constantly limited durability. "I guess I'll have to make a battery," he said.

He defined the problem for himself: to attempt an entirely new voltaic combination that would make his "box of electricity" light, durable, undeteriorating, quickly chargeable, economical, and capable of storing a larger amount of energy than possible with the type of battery using lead electrodes. Such an instrument, he felt, would "open up a new epoch in electricity."

Having gathered personnel and equipment, he gave the signal for the hunt to begin. Beginning in 1901, hundreds of tests

were made of various grades of copper and finely divided iron, and the results were set down painstakingly in laboratory notebooks. The number of experiments mounted up into the hundreds, then to the thousands. A year, eighteen months went by, and they had not even a clue. After many more trials, they tried nickel hydrate and began to get better results. It was, however, a poor conductor. The tests continued.

At sixty, stout, round-faced, and deafer than ever, Edison had nonetheless changed very little in spirit and method since he had invented the carbon filament lamp thirty years earlier. There was the same abandonment to studies. His temper, to be sure, was a little shorter nowadays, sometimes violent when a clumsy mechanic upset things; but he continued to show an unfailing patience in the face of repeated disappointments. In fact, it was a rule with him never to show grief or bitterness, even when some long-prepared experiment proved to be a failure. Things came to him nowadays, as in the past, mostly by hard work and taking the time to "try everything."

Sometimes he alluded to himself as a sort of Don Quixote, who was tilting at scientific windmills in order to liberate the good storage battery. His chief draftsman, John Ott, long in his service, he nicknamed Santcho-Pantcho.

Once, when a new employee respectfully asked to be informed about the laboratory rules and regulations, Edison spat on the floor (he was chewing tobacco) and expostulated, "Hell, there ain't no rules around here! We're tryin' to accomplish somep'n."

He gave the utmost care to the design of an entirely new battery form. From rough sketches and models he evolved a novel structure of nickel-plated steel, the positive pockets being packed with nickel hydrate and the negative being of iron oxide.

At last, in 1903, he was ready to test his batteries in actual usage. He installed them in carriages with a small electric motor and chain drive, and ran these vehicles over the rough country roads near Orange. Records were kept on test sheets and closely

scanned. In his laboratory Edison also set up an electrical apparatus that jolted his battery cells up and down, day and night, in simulation of heavy road usage. They were even thrown out the windows of the upper floors to test durability. He wanted his batteries to be foolproof.

Finally, at Silver Lake, in the summer of 1904, a manufacturing plant was made ready, special machine tools were set out, and 450 workmen were engaged. Production slowly got under way, and in the first season several thousand cells of the first battery model, the "E," were turned out. The demand far exceeded what Edison could supply; merchants and transport concerns had the first Edison storage batteries installed in light delivery wagons and, at the outset, found their electric carriages and trucks highly convenient.

With his usual self-confidence Edison had started a rousing publicity campaign for his "revolutionary" storage battery even before he was ready to manufacture it. Thus, in interviews during 1903, and early in 1904, he announced that there would soon be "a miniature dynamo in every home . . . an automobile for every family." The new Edison battery had great power, weighed next to nothing, had neither acid nor lead, would not deteriorate when not in use, was almost endlessly rechargeable, and could withstand almost any mistreatment.

He concluded:

> . . . I hope that the time has nearly arrived when every man may not only be able to light his own house, but charge his own machinery, heat his rooms, cook his food, etc., by electricity, without depending on anyone else for these services.

In short, he had "revolutionized the world of power" the newspapers reported; he had brought forth the "age of stored electricity," destined to change sea travel, land transport, warfare, and agriculture. The outlook for the ill-smelling gas buggies seemed dark indeed!

Edison posed for news photographers standing beside a spanking little red sulky which had nickel-iron batteries and an electric motor. It was so easily run, he declared, that his twelve-year-old boy Charles could drive it. With that he leaped on board and sped away at twenty miles an hour.

However, bad reports soon began to come in from the first users; and then the reports grew steadily worse. After all the propaganda, it was a shock to learn that the battery containers leaked on being used in vehicles; that the cells were of uneven performance, and usually dropped about thirty percent in power. Defective batteries returned to the factory were broken up and examined. The electrical contacts in the positive element were found to be unreliable.

The truth about this fiasco was spreading. All the exuberant advance publicity had but made things worse. Moreover, Edison this time had raised $500,000 through friendly investors by giving a bond and mortgage on his other manufacturing properties; and these funds had all been exhausted by the work of research and the cost of setting up the factory.

He recognized that his battery still needed prolonged study before it could be marketed. But if he shut down his plant and set to overhauling the whole job in his laboratory, he faced a very heavy financial loss. Still worse, and most humiliating to him, would be the public admission of failure, after his sweeping claims of success.

After a brief discussion with his financial associates, he made his decision swiftly. He would shut down production at once and take back all the batteries that had proved defective, at his own cost. One of his associates questioned his wisdom in stopping production, pointing out that his batteries were still far in advance of the old-style lead ones. To such objections Edison replied flatly, "I stopped manufacturing because the battery was not satisfactory to myself. . . ."

It was an act of courage. And now, since the Edison Storage Battery Company had used up all its capital, he financed it out of his own pocket.

Fortunately the motion pictures were now booming, thanks to *The Great Train Robbery* distributed by Edison's studio in 1904. This film—now regarded as the classic prototype of the motion-picture *play*—generated a new wave of popularity for motion pictures. A flood of Westerns and thrillers followed, and little motion-picture theaters and nickelodeons mushroomed all over the country.

Now, at Edison's command, virtually his whole laboratory force set to work to overcome the irregularities that had shown themselves in the first battery. The new series of experiments brought forth more variables, and were to engage the labors of Edison and his staff for five years more. But Edison vowed that he would find the right way to make a battery—"If it takes me seven years and $1,750,000"—alluding here to the cost of his recent education in iron-ore milling.

By the summer of 1905 Edison could report that he had again made a "vast number of experiments, now reading 10,296," and that he "had found out a great many things."

Then in the winter of 1905, while working under great stress, he became very ill, and underwent what was then a fairly dangerous operation for mastoiditis. Henceforth he would be almost stone-deaf. Though the annual winter vacation at Fort Myers would have benefited his health, and he longed to go, he returned instead to his laboratory to watch the testing of hundreds of new combinations for battery cells and examine the test sheets being compiled for them.

Though the road seemed to lead through all the turnings of an immense labyrinth, Edison insisted on preserving a mask of outward composure and good cheer. Nevertheless, the ten years' hunt for a good storage battery was a prevailingly somber period, Edison's associates recalled, despite his ideas about keeping up morale. Age was coming upon him; his long, thick hair grew very white, while his well-defined eyebrows remained very dark, accentuating his pallor.

In the year 1907 the newspapers reported that a Rolls-Royce car with a six-cylinder gasoline engine had passed a ten-thousand-mile endurance test. In Detroit, Henry Ford, working

with a will as fierce as Edison's, perfected a cheap fifteen-horsepower four-cylinder engine for his Model N car, precursor of the celebrated Model T. The Model N went twenty miles on a gallon of fuel and cost only $600. "Hundreds of persons," it was reported, rushed to buy Ford's small car.

During the years of extreme tension created by the unrelenting campaign for the nickel storage battery the inventor's family found him more "difficult" than usual. An article in *Collier's Weekly,* based on a lengthy interview with Mrs. Edison, was titled "She Married the Most Difficult Husband in America." To the interviewer Mrs. Edison declared that she had dedicated her life to the service of her great man, "and thought it worth it a thousand times over." He had few friends and lived, she said, "a great deal by himself and in himself, shut out from the contacts open to most men." Neither hobbies nor amusements interested him. Mrs. Edison and the children "always put his work first," and his home and family life were organized to that end.

Mina Edison had great influence over her iron-willed husband. That he loved her greatly, and that he also esteemed her, was beyond doubt. Though time pressed, he would linger with her for some moments each day, in her garden or in the big conservatory at Glenmont. And every day when he left the house and when he returned, he would kiss her. If she were not nearby as he went to work, he would send a servant to call her.

To the young children of his second marriage, he was by turns teasingly affectionate or remote. "Sometimes it was as if he never saw us," his youngest son, Theodore, said long afterward. The distance from his children had an unfortunate effect on his two elder sons. But Mina Edison was determined that with *her* children, at least, it would be different, that there should be no such alienation from the father. She therefore encouraged her eldest son Charles to be with his father as much as possible and, during school vacation, to work in his laboratory, even at the humblest tasks, such as the "bottle monkey's."

* * *

In the years 1905 to 1908 the whole structure of the storage cell was redesigned. By prolonged experimenting Edison and his co-workers brought about one improvement after another, and helped to clarify the major problem. The stubborn riddle of drop-off in capacity from cycle to cycle of charging and discharging was finally solved sometime in 1908.

After they had tried hundreds of different additives, a small amount of lithium hydroxide was introduced. This had the effect of raising capacity and then holding it steady over a long period—"a real piece of magic" that could never have been calculated theoretically in Edison's time. His empirical work, carried out at a cost of a million dollars of his own money, was successful in the end.

"At last the battery is finished," Edison wrote in the summer of 1909, with evident relief. It seemed "an almost perfect instrument." A year later factory production was resumed on a large scale; in the first twelve months thereafter a million dollars' worth of the new A battery cells was sold, beginning a profitable career for the Edison Storage Battery Company that has continued to this day.

Several important carriage works hastened to produce electric runabouts and light trucks that were powered by an array of Edison cells. Department stores used such electric trucks for years. Light electric town cars were popular for a period because they were noiseless and fumeless; their radius was about sixty miles a day, and their Edison batteries could be fully recharged in seven hours.

However, when winter came it was common for many Edison-powered vehicles to become stuck in snowdrifts or on muddy roads. Meanwhile the far-ranging gas buggies of Ford and others, with their cheap, improved combustion engines, swept all before them.

On the other hand, the beautifully constructed Edison battery was found particularly useful where dependability and long life were important, as at power plants, and for railway signaling; or to provide current for miners' lamps, train lights, and other railway and marine appliances. Though the electric

automobile had only a brief vogue, a remarkably wide field of usage was developed in industries such as mining and quarrying, on merchant vessels, and ships of war.

Was it worth the tremendous effort? Edison used to profess that his inventive work was guided only by the criterion of commercial success. But the profits were rather on the moderate side when measured against the "punishment" he had taken in that series of heartbreaking experiments lasting nearly ten years. The thought of calling a halt at some midway point and cutting his losses was never tolerated. Why did he go on and on? "I always invent to obtain money to go on inventing," he said simply.

He "rested" at intervals, during the campaign for the storage battery, by turning his attention to a number of highly different inventive tasks. One such new departure was the sizable Edison Portland Cement Company. Edison foresaw a large expansion of reinforced concrete construction in America. In such spare moments as he had, he drew up engineering plans for an entirely new type of cement kiln. His plant, when completed in 1907, was designed to grind out a thousand barrels of cement every twenty-four hours, when the average cement kilns produced only two hundred barrels a day.

At about this same period the spreading phonograph "craze" kept his factories at West Orange working on a two-shift basis, and by 1914 the volume of Edison's phonograph business, stimulated by the countrywide ragtime mania, surpassed seven million dollars annually.

Motion pictures, made immensely popular by the star system, brought revenues that were even bigger. A business dictating machine, the Ediphone, demanded another new manufacturing unit. To this he added the Telescribe, a machine combining the dictating phonograph and telephone, which recorded both sides of telephone conversations.

He kept control of his enterprise in his own hands, nowadays, and owed money to no man. He had reorganized his various industries and combined them in one corporation under

the title of Thomas A. Edison, Incorporated. Thus in the closing years of his life he created a "family business" embracing about thirty different enterprises whose gross annual sales amounted to between $20,000,000 and $27,000,000.

Thanks to the phonograph and motion-picture industries, he now ranked as a member of the country's select group of multimillionaires. But while his industries earned, at times, as much as two million dollars of profit annually, he boasted that he "never paid any dividends." As fast as profits were realized from one invention, he would plow the earnings into research and development in new fields.

Probably no professional inventor was ever engaged in so many businesses, or in so much manufacturing, selling, and "meeting of payrolls." His son Charles, who was twenty-four in 1914, had studied at the Massachusetts Institute of Technology and was being trained to serve as an executive in various departments, so that he might eventually become head of the entire concern. Nonetheless, while he lived, Thomas A. Edison ran the whole business and the laboratory as well, according to his own lights.

They were doing a land-office business at the Edison works in West Orange, in 1914, when disaster struck without warning.

On the evening of December 9, 1914, Edison had gone home early for dinner, a clear sign of old age coming on. Just before 6:00 p.m. fire broke out in a small wooden structure in the factory quadrangle, where chemicals and inflammable motion-picture film had been stored. The factory fire squad quickly went into action, but water pressure in the village of West Orange was low.

Since most of the adjacent factory buildings were of reinforced concrete, then considered fireproof, it was hoped that the fire would not spread far. (Because of their "fireproof construction" he had had them insured at less than a third of their cost, which was more than a million dollars.) But the burning chemical products shot forth great geysers of green flame which soon enveloped neighboring buildings. Fire companies from

eight nearby towns soon rushed to the scene, but falling water pressure balked all their efforts.

The several factories in the path of the wind were soon in full conflagration; one of them, Building 24, which was six stories high, contained large stores of chemicals which sent up spectacular flames from big tanks on its upper floor. Numerous firemen and volunteers were overcome; one Edison worker was killed.

Charles Edison, on hand to help direct emergency measures, was overwhelmed by the horror of the scene and his sense of despair. His father, called from the dinner table at Glenmont, came walking slowly into the yard, silent, impassive. The whole Edison "empire" was going up in green and yellow flames; yet he stood and watched it all with folded arms.

Fortunately the big library and main laboratory buildings were out of the path of the flames. But the administration building at one side of the yard, containing stores of valuable instruments, was partly on fire; and the firefighters and volunteers hastened to carry out such supplies as they could reach.

At last the Old Man spoke to his son Charles. "Where's Mother?" he asked. "Get her over here, and her friends too. They'll never see a fire like this again."

Charles began to lament the incalculable loss. But his father only said dryly: "Oh shucks, it's all right. We've just got rid of a lot of old rubbish."

However, he soon went into action, stayed up all night, and directed the removal of such valuable merchandise and machinery as could be saved. A crowd of ten thousand persons had gathered to watch the fire. Late in the night the fire was gradually extinguished. At dawn the place was still smoldering.

Many persons came to Edison, or telegraphed, expressing their sorrow at this catastrophe. To one such sympathizer Edison replied, "I am sixty-seven; but I'm not too old to make a fresh start." But to his son Charles he said: "I wonder what we will use for money?"

On the day after the fire he directed a crew of fifteen hundred men who cleared the ruins and removed the debris. He

again worked with furious energy, as in his youth. Factory space was rented in nearby towns; machinery was set up, and men put to work. On the security of a large amount of receivables due him, he negotiated loans at banks. At news of his misfortune, Henry Ford hastened to New Jersey and generously lent Edison $750,000 in order to speed the work of reconstruction. Edison, over the years, repaid the debt in full.

Within three weeks the Edison factories had been restored to some semblance of order; and shortly after New Year's Day 1915 most of the personnel were at work in two shifts. The speed of recovery was almost as spectacular as the disaster.

NINE

Canonization

A new phase of glory as America's acknowledged folk hero had opened for Edison after the turn of the century as he approached his seventh decade, a glory that could at times be burdensome. The electric utilities—power companies such as the Chicago Edison Company now headed by his former financial manager, Samuel Insull—had become the new giant among industries, and had long since unofficially adopted Edison as patron saint. Edison symbolized electricity—thoughts and words soaring across great distances: energy freed from the engine and belt by smokeless motors; cities wreathed in light.

His legendary success story, like his expressive face, was familiar to all men. His very appearance, and his widely reported sayings—racy, humorous, and original in flavor—but strengthened the will of the multitude to idolize him. He was chosen repeatedly, in popular newspaper or magazine polls, as America's "greatest" or "most useful citizen." In short, he was almost universally regarded as one of the real makers of America, and so, well suited to serve as folk hero.

Newspapermen could never resist him. At his annual birthday interviews, one of the reporters usually opened up by saying, "Happy birthday, Mr. Edison. How are you feeling today?" The question having been relayed to him, on one occasion, by his old secretary, W. H. Meadowcroft, Edison wheeled about

suddenly, executed a high kick clearing his big laboratory table and all its paraphernalia, then brought his leg down to the floor and shouted, "Fine as silk!"

To what did he attribute his success? was one of the most oft-repeated questions. Was he not a genius? One of his justly memorable phrases in reply to such queries was, "Genius is ninety-nine percent perspiration and one percent inspiration."

His gospel was "Work"—bringing out the secrets of nature and applying them for the happiness of man." He for his part would never retire "until the doctors brought in the oxygen cylinder." At seventy-five as at forty-five, he felt well because he worked "two shifts." Mrs. Edison, it seems had cut down his hours to only sixteen a day.

In the late fall of 1910 a lively and prolonged controversy was provoked by Edison when he candidly professed himself to be a freethinker in religious matters. To the question put to him during an interview, "What does God mean to you?", he replied, "A personal God means absolutely nothing to me." Moreover, he declared himself an enemy of all superstition, deplored the fact that most people were "incurably religious," and pointed out that "billions of prayers" had brought no mitigation of natural catastrophes such as great wars.

Edison's mailbag at the Orange post office was soon swollen with angry letters from pious folk. Ministers in their pulpits protested his materialistic bias. Believers beseeched him "not to take away their God." Business associates pleaded with him not to destroy the prestige of his great name and injure Edison industries. Some of his remarks, reflecting a spirit of levity toward the superstitious, were given circulation and further irritated the orthodox. To a minister's query as to the value of lightning rods as protection for his church spire, Edison replied, "By all means, as Providence is apt to be absentminded." In the face of attack, he held his ground staunchly, saying:

> The criticisms that have been hurled at me have not worried me. A man cannot control his beliefs. . . . I

> try to say exactly what I honestly believe to be the truth. . . . I have never seen the slightest scientific proof of the religious theories of heaven and hell, of future life for individuals, or of a personal God. . . . Proof! Proof! That is what I have always been after. I do not know the soul, I know the mind. If there is really any soul I have found no evidence of it in my investigations. . . . But I have found repeatedly evidence of mind. . . . I do not believe in the God of the theologians; but that there is a Supreme Intelligence, I do not doubt.

On the question of education, Edison's opinions aroused almost as fierce controversy as his idea on religion. What was abhorrent to him was all formal schooling and college training, such as he himself had managed so well to do without. "I can hire mathematicians at fifteen dollars a week," he had once said, "but they can't hire *me.*"

School, for him, meant only teaching and learning by rote. He advocated that every child be encouraged to develop his faculties by *making things,* and by observing nature for himself, instead of having his mind crammed with memorized facts.

Edison also assailed the whole idea of teaching the liberal arts in higher institutions.

> What we need are men capable of doing work. I wouldn't give a penny for the ordinary college graduate, except those from institutes of technology. . . . They aren't filled up with Latin, Philosophy and all that ninny stuff. America needs practical, skilled engineers, business-managers and industrial men. In three or four centuries, when the country is settled and commercialism is diminished there will be time for literary men.

What was not known at that period was that his attempts to educate his own children had been a complete failure. (I speak

here of the elder children born of his first marriage; those of the second marriage were quite differently brought up by Mina Edison.)

On the strength of his own experience, he had discouraged his eldest son, Tom junior, from going to college. Such schooling as he had did not reach beyond the high-school stage. As for William Leslie, the second son, he showed no aptitude for learning and was not interested in going beyond a preparatory school. The spirit of the elder sons was undoubtedly affected by the early loss of their mother in 1884. It was not easy to be the son of such a father, so often obsessed by his work, and seemingly so self-centered or remote.

Edison's second marriage, moreover, had introduced a painful division in the family. Mina Edison was but a few years older than her stepdaughter Marion and her stepson Tom and naturally found it difficult to impose her authority over them. Marion had shown from the outset an adolescent hostility, or jealousy, toward her young stepmother. Always an attractive and independent personality, Marion was never a problem to her parents, and in her later years maintained very friendly relations with the younger Edison children.

Tom junior had much sweetness of personality and showed some little mechanical bent. Sad to say, he even tried to be an inventor on his own. Later, like his brother Will, he drifted away from the parental home. Though regularly supplied by his father with enough funds to live on, Tom was often in trouble, and for a period drank a good deal.

In 1904 Edison formally disowned Tom junior, because he had allowed the Edison name to be exploited by dishonest associates. But as Edison was, in reality, very fond of his eldest son, a reconciliation was effected, and the prodigal youth was brought back again, to be employed in various departments of the Edison industries.

William Leslie, a tall and athletic youth, created anxieties of a somewhat different nature for his parent. Will was sometimes described as headstrong and stormy; despite efforts on his fa-

ther's and Mina Edison's part to encourage good relations, he maintained an attitude of hostility toward his stepmother.

The destiny of the later children, born of Mina Edison, proved to be far more fortunate than that of the elder ones. Their mother brought them up in her own Methodist faith, reared them with care and affection, and stoutly opposed her husband's counsels that their formal or religious education be limited. On the contrary, their daughter Madeleine was sent to Bryn Mawr College; Charles and Theodore attended good private schools, and completed their education at Massachusetts Institute of Technology.

In 1914 Charles had set to work in earnest learning the family business under his father, with whom he always got on well. Several years later he was made executive vice-president; on his father's retirement (in 1927) he was to succeed him as head of Thomas A. Edison, Incorporated—which had been the fond wish of Mrs. Edison all along.

Theodore Miller Edison, born in 1898, made an excellent record as an engineering student at the Massachusetts Institute of Technology, showing a passion for science. But to the elder Edison's dismay, his youngest child seemed determined to become a mathematical physicist—one of the breed that Edison had always belittled. This made for dissention in the family, for Theodore proved to be as strong-willed as his father, and in the face of paternal disapproval continued his studies of higher physics.

"Theodore is a good boy," the father said," but I am a little afraid . . . he may go flying off into the clouds with that fellow Einstein. And if he does . . . I'm afraid he won't work with me."

"Is it not strange that a man who always did exactly what he pleased would not let his own children do anything that they wanted to do?" a member of the family is reported to have remarked at this time.

A few months after the outbreak of war in Europe in August 1914, a newspaper reporter interviewed Edison and recorded

his thoughts on the great conflict. Principally it made him "sick at heart" for mankind, as he said. "This war had to come. Those military gangs in Europe piled up armaments until something had to break." Reflecting American public sentiment, which was decidedly neutral in the first year of the war, he asserted that he would have no part in it. "Making things which kill men is against my fiber."

But in the late spring of 1915, at the time of the sinking of the S.S. *Lusitania* by a German U-boat, Edison changed his mind and allied himself with "preparedness" groups who were urging that we expand armaments and train military personnel for the eventuality of war.

The military services were already making plans for expansion. Secretary of the Navy Josephus Daniels attempted to organize an advisory board of scientists and inventors whose minds would be at the service of the military.

Since nothing could be more natural than that Edison himself should head such a board, Daniels wrote him inviting him to undertake "this very great service for the Navy and the country at large." President Woodrow Wilson approved of the proposal. Edison replied promptly with the equivalent of a cheerful "Aye, aye, sir." If his country needed his inventive skill to make her safe from attack, he would willingly respond.

On receiving his acceptance, Secretary Daniels hastened to West Orange and discussed the plan of the proposed board with Edison, who shrewdly advised that instead of just naming two or three famous inventors, such as himself and Wilbur Wright, as its members, Daniels should address himself to the country's leading scientific and engineering societies, and invite them to select outstanding persons in their different fields. This was done, and a rather impressive group was gathered together for the Navy Consulting Board. At the initial meeting at Washington, in October 1915, Edison was formally appointed its president. The board met only at rare intervals at first.

However, tension between the United States and Germany rose in the early months of 1916, and the scientists of the Navy Consulting Board grew more active as the war came closer.

One of Edison's most significant proposals was that the Navy establish a scientific research laboratory for the development of new weapons. The nation's military services had never evinced any interest or spent any money on technical research, since the days of John Paul Jones. Improved weapons were adopted in a haphazard fashion, usually after experimental work by private ordnance manufacturers. Edison pushed his proposal to establish a naval research laboratory with characteristic tenacity and in the face of stout bureaucratic resistance, so that eventually such an institution was authorized by Congress. The Naval Research Laboratory was to be Edison's most vital contribution to the national defense; between the two world wars it would be the only American institution for organized scientific research in weapons, hence of enormous importance in preparing for the technological warfare of the 1940's.

Late in December 1916 Secretary Daniels called on Edison and told him in confidence that the Allies were fated to lose the war unless they could stop the German submarines. He now asked Edison to give all his time to inventing antisubmarine devices. Edison promptly turned over his business affairs to other hands and plunged into this work. He was thus occupied when the United States entered the war against Germany in April 1917.

Giving free rein to his fine mechanical imagination he contrived a whole series of defensive instruments against U-boats: a device for quick turning of ships; one for locating guns and torpedoes; another for raising smoke clouds to cover merchant vessels; antitorpedo nets; hidden lights; turbine heads for projectiles; collision mats; and finally a sonic apparatus, employing a submerged phonograph diaphragm, to detect submarines.

When the war drew to its end the Navy, at Secretary Daniels's wish, tendered the Distinguished Service Medal to Edison, a rare honor for a citizen. He refused it, saying that he "did not wish to hurt anyone's feelings," and was aware that other civilian scientists who had helped in the war effort would believe they were entitled to equal honors.

He turned his attention again to his own business. After the wartime inflation, a depression was under way, and the Thomas A. Edison works, like other "war babies," needed to be trimmed down. He removed many hundreds of workers from his payrolls, but the old-timers, even the feeble ones, he insisted, must remain, especially in the laboratory.

TEN

Sunset, with Electric Illuminations

In the autumn of 1922, Edison visited the General Electric Company's huge plant at Schenectady after an absence of twenty-five years. The factories that had grown up out of the old Edison Machine Works now extended "for miles" and employed 18,000 workers who, at the order of President Gerard Swope, assembled to welcome and cheer Edison. Here hundreds of scientists and technicians were at work in fields of technology that Edison had only dimly imagined. Dr. Charles P. Steinmetz showed him around the laboratory and demonstrated his "lightning bolts," capable of discharging 120,000 volts at a bar of tungsten, causing it to "vanish" and turn into gas. W. R. Whitney, director of the laboratory, showed him a new process for converting tungsten into lamp filaments. The aged inventor sighed, and recalled what great troubles he had encountered in his own attempts to experiment with tungsten. Dr. Irving Langmuir also displayed new vacuum tubes for long-distance transmission; also a 100,000-candlepower lamp, and photoelectric mechanisms that reproduced sound on tape for motion pictures and phonographs. Edison declared that he had greatly enjoyed seeing "the old place, and the old boys," but admitted that it had changed, had grown up.

Some time after his visit to General Electric, Edison, old free lance that he was, declared that the "corporation labora-

tory" would not do. The inventor was now a "hired person," assigning to the corporation all his patents; such men worked in large groups and held many conferences. The "weight of organization" was too great, Edison observed shrewdly; and the results, he predicted, would not be as rich as in the case of individual inventors working in small organizations.

In his late seventies Edison gave most of his attention to the improved phonographs, business machines, and secondary and primary batteries. The fortunes of the Edison industries were at full tide during the postwar boom, toward 1923, then ebbing as radio came into general use and competing manufacturers placed on the market newly invented electronic phonographs, or even phonographs and radio receivers in combination. Edison could not abide the new recording instruments, and as for radio, he predicted people would want to listen to music of their own choice and the "radio craze" would soon pass.

The old mechanical phonograph business, however, was falling off rapidly; Edison's nationwide organization of thirteen thousand phonograph dealers threatened to disappear. His sons Charles (who by then was playing a leading role in the family business) and Theodore begged him to make both radio receivers and electronic phonographs. According to Theodore Edison, his father opposed the new ventures until it was too late to enter upon them.

His youngest son, Theodore, considered the most talented of his children, he regarded with mixed feelings of puzzlement and respect. There had been, at times, some lively disputes between them on the score of Theodore's addiction to mathematics and the method of theory and calculation. On one occasion, when no agreement seemed possible, the young man had packed his trunks and prepared to leave West Orange to look for a job somewhere else; but his father capitulated and agreed to have him work in his own way. An old shed was turned over to Theodore for use as a laboratory. After a while his work appeared impressive enough to warrant his transfer to a fully equipped laboratory, and eventually—two years after his father's retirement—to the

post of technical director of the Edison Laboratory, as well as a member of the company's executive board.

In the autumn of 1926, when he was well along in his eightieth year, Edison at last announced that he had decided to retire. His son Charles would succeed him as the head of Thomas A. Edison, Incorporated and he would limit himself thereafter to laboratory experiments.

For several years the interest of the Old Man had been directed to an entirely new field of operations. It was to be a last "campaign" of experimentation to which he would surrender himself with all his unfailing enthusiasm. "I have had sixty years of mechanics and physics," he remarked as he now turned to another science, as much for his own pleasure and amusement as for any profit that might come of it. He was botanizing; but as always there was a practical object in view.

Rubber had recently become one of the most important commodities for the modern industrial world, thanks to the automobile. It was produced in distant tropical regions and in wartime became scarce and extremely dear. Back in 1915, while visiting Luther Burbank's plantation in California with Ford and Harvey Firestone, Edison had remarked that if the United States entered the war, rubber would be the first product to be cut off. Ford had asked him to do something about creating a domestic supply, or a substitute, to which Edison replied, "I will—some day."

When rubber became costly again toward 1924–1925, owing to the British Far Eastern rubber-restriction scheme, Ford and Firestone renewed their pleas that Edison undertake a serious investigation of domestic sources of rubber, which they offered to finance. The Edison Botanic Research Company was organized in 1927, with the Ford and Firestone companies each advancing $93,500 to cover the costs of research, while Edison agreed to contribute his labor. Thus he was engaged once more in one of his famous hunts, "ransacking the world" for some plant, either existing or to be developed by cross-

breeding, which contained sufficient rubber to be processed on a large scale. Once more the Old Man had a happy look in his eyes as he began his new studies at Fort Myers in the winter of 1927.

His mental powers, at eighty, showed no perceptible decline. He "got the whole subject of rubber into his head" so he could see every phase of his problem. The main source of supply was the *Hevea brasiliensis,* a tree native to Brazil, but successfully transplanted on a large scale to Malaya, Ceylon, and Africa. It was well known to scientists that numerous other plants, even those common to the North Temperate zone, contained latex in varying quantity. What Edison hoped to find was a crop native to the United States, and capable of being cultivated, harvested, and processed within a year or eighteen months, so as to provide a source of supply in the event of war or other emergency.

In less than a year Edison reported to Henry Ford that he had collected 3,227 wild plants and shrubs from points ranging between New Jersey and Key West, and that seven percent were found to have rubber in various quality and amounts. "Everything looks favorable to a solution. . . ." he concluded with his unvarying cheerfulness.

At the end of a second year's search, when some fourteen thousand plants had been examined and tested, of which about six hundred contained some rubber, Edison, after flirting with honeysuckle and milkweed, fixed on the domestic goldenrod as the most promising plant of all. Goldenrod yielded about five percent rubber. Edison selected the varieties that seemed most promising, and crossbred. It was time-consuming; but a giant goldenrod about fourteen feet tall yielding about twelve percent latex was ultimately developed. Ford was so greatly encouraged by Edison's reports that he purchased an extensive acreage in southern Georgia for the raising of goldenrod.

Edison worked on at his Florida botanical laboratory even in the heat of spring and early summer. Then, in the late summer of 1929, while at West Orange again, Edison fell ill; his

whole digestive apparatus seemed affected and there was some indication of kidney malfunction and diabetes.

But he rose from his bed saying, "Give me five years and the United States will have a rubber crop." But who, now, could give Edison five years?

Oddly enough, not only Edison, but Henry Ford, the DuPont Company, and Standard Oil of New Jersey, after 1925, received information about the new German chemical process for converting coal or petroleum derivatives into synthetic rubber. Government scientists thoroughly explored the possibilities of using vegetable materials such as Edison's variety of goldenrod, but reached the conclusion that processing such plants would be more difficult and costly than making synthetic, and would yield a product inferior to natural India rubber or the new synthetics.

Edison's goldenrod rubber project, therefore, was foredoomed. If Henry Ford suspected this, the motor king would not have moved a hand to stop Edison's dying effort. Where Edison was concerned, Ford was all sentiment.

In 1929 Harvey Firestone, having received a shipment of the costly goldenrod latex from Fort Myers, obligingly turned out four rubber tires for the inventor's Model-A Ford touring car.

Edison did not recover quickly from his illness. He was suffering from uremia, yet worked in his botanical laboratory, assuring all and sundry that the solution of the rubber problem was at hand. "We are just beginning. . . ." he said.

THE ninth decade of the inventor's life was a time for the erection of monuments in his honor, a time for the bestowal of medals, ribbons, decorations. He was a walking monument himself, in fact, an immortal. From the governments of Japan, Russia, Chile, and many nations lying between, honors were heaped on him, and on May 21, 1928, his own government, by a resolution in Congress, awarded him the Congressional Medal of Honor.

A signal event in Edison's old age was Henry Ford's decision to build an immense museum of the history of industry and invention, as a monument not only to himself but also to his friend Edison, in Ford's native town of Dearborn, Michigan.

Hence Ford began to gather up relics of the legendary Menlo Park laboratory, now in ruins. He not only scoured the New Jersey countryside for the very planks that had fallen off Edison's old sheds, but also gathered together a notable collection of original models of Edison's inventions, installing them in a section of Greenfield Village in Dearborn that was at first known as the "Edison Institute." These models were so well restored or, in some cases reproduced (with the advice of Francis Jehl, of the original Menlo Park team), that everything worked as before, the paper-carbon lamps as well as the 1882 dynamos. About three millions were thus lavished by Ford upon his collection of Edisonia alone, the total cost of Greenfield Village being more than ten million dollars.

Early in 1929, when the Ford Museum and Greenfield Village were nearing completion, Ford decided, with Edison's consent, to combine the dedication of his own institution with a celebration in honor of the fiftieth anniversary of Edison's incandescent lamp invention. He ordered his builders to rush the job on the great museum building, for it was to be the stage setting in October 1929 of the opening-day banquet.

When Edison finally stepped from the train at Dearborn, two days before the Golden Jubilee of Light was to open, he looked "like a benevolent old wreck," for he had been so gravely ill, in August 1929, with pneumonia that his life was feared for. Now as Edison beheld Greenfield Village and the transplanted Menlo Park, he smiled his broadest smile. The laboratory stood in its native red New Jersey clay (transported thither by train) and even had a heap of old metal junk lying outside. For had not Edison once said that when the good inventor needed was "imagination and a scrap heap"?

Here were all the old bulbs, telegraph instruments and stock tickers, the dynamos, the old generating plant of Pearl Street, and even an old mortar and pestle he had used and

thrown away. There was not only the old laboratory, but also Mrs. Jordan's boardinghouse across the road from it; even the old railroad station at Smith's Creek, Michigan, where he had worked, and beside it a reproduction of a little Grand Trunk Railway train, including the baggage car with Tom Edison's little laboratory-on-wheels!

After Ford had shown him this truly monumental restoration Edison said, "Well, you've got this just about ninety-nine and one-half percent perfect."

"What is the matter with the other one-half percent?" Ford asked.

"Well, we never kept it as clean as this!" Edison drawled.

President and Mrs. Hoover, with attendant secret-service men, arrived on the morning of the twenty-first of October, at the head of a delegation including the nation's most eminent political and financial personages. At nightfall, after all the sights had been displayed to the distinguished guests, Edison appeared on the second floor of the "Menlo Park" laboratory to demonstrate how he made a carbonized thread and vacuum globe in 1879 and at a given moment turned it on.

The excitement had been wearing for the Old Man. But the festival was still to be topped off with a banquet for five hundred guests. President Hoover was to give the principal address. But at the door of the banquet hall Edison faltered and all but collapsed. Led to a settee in the corridor, he sat down and wept, overcome with emotion and fatigue.

"I won't go in," he said to Mrs. Edison. Only she could have overcome his resistance. They brought him some warm milk; he revived a little, entered the hall and took his place at the seat of honor. Messages from many nations were read, tributes were offered, while he heard nothing and ate nothing. President Hoover spoke.

> "I have thought it fitting for the President of the United States to take part in paying honor to one of our great Americans. . . . Mr. Edison . . . has repelled the darkness . . . has brought to our country great distinction

throughout the world. He has brought benefaction to all of us. . . ."

Edison spoke briefly, but with feeling, in reply. He was happy, he said, that tribute was being paid to scientific work.

"This experience makes me realize as never before that Americans are sentimental and this crowning event of Light's Golden Jubilee fills me with gratitude. As to Henry Ford, words are inadequate to express my feelings. I can only say to you, that in the fullest and richest meaning of the term—he is my friend. Good night."

Then he slumped into his chair and turned as white as death. Mrs. Edison and President Hoover's physician at once helped him to a room in the rear of the speaker's table, and laid him on a sofa. Drugs were administered, and he came to; then he was taken to the Ford residence and put to bed for several days. "I am tired of all the glory, I want to get back to work," he said.

During his recent illness he had permitted doctors to examine him thoroughly. They had found that he suffered from a combination of uremic poisoning, Bright's disease, diabetes, and gastric ulcer. It was a mystery to the medical men how he had lasted so long.

His days in the laboratory were now definitely over, though none was supposed to mention that to him or anyone else. "Keep him going. Don't change anything, have the same people, don't let him stop," the family doctor advised.

He absented himself for longer and longer intervals from his laboratory in the two years of life that remained. Often he stayed abed or sat in an easy chair at home, but still kept in close touch with his technical assistants, who daily brought him news of the progress of the goldenrod rubber experiment. Mrs. Edison watched patiently over his rest and diet, and main-

tained an almost daily routine of motor drives with him along the country roads of New Jersey.

In those last years of ill health and weakness Edison's interest in new "campaigns" never flagged. Having recently met Colonel Charles A. Lindbergh, he insisted on being taken to Newark Airport to learn something about the problems of airplane landing and takeoff. "The aviators tell me that they must find a means to see though a fog," he said. "I have an idea about it. I am waiting for a real fog—a water fog—and I will see if I can't penetrate it." Perhaps a rocket would do the trick?

At about this period he ventured the prophecy that "There will one day spring from the brain of Science a machine or force so fearful in its potentialities that even man, the fighter who will dare torture and death in order to inflict torture and death, will be appalled, and so will abandon war forever. . . ." He was greatly interested in the impact of Albert Einstein's formulations, but admitted that he couldn't understand any of them. "I am the zero of mathematics," he conceded ruefully. In one of his last interviews, he went on to say, "I am much interested in atomic energy, but so far as I can see we have not yet reached a point where this exhaustless force can be harnessed and utilized."

On August 1, 1931, he had a sudden sinking spell and lay at the point of death. He could absorb virtually no food at all—but, to the astonishment of his physicians, he rallied and tried to rise from bed again. But as soon as he understood the real state of affairs, that he would never be well enough to go back to work, he seemed to lose the desire to live.

Now, for the first time, he ceased to fight; as he lay in bed reading or writing in one of his notebooks, the words or drawings wavered, the notebooks slipped from his hand.

In October, when the sharp-thrusting hills of the Orange Valley were truly daubed in orange, he sank again. Gloom hung over the mansion in Llewellyn Park. Edison slept, waked a little, and drowsed again. There were several eminent medical men attending him, and he persisted in discussing their method of treatment, inquiring of them what medicines they were try-

ing, how his body was reacting—and why. After blood tests were taken he would insist that the chief physician bring him slides and microscope so that he too might examine them. When the chart was set up before him with its stabilized line, he could read it and follow his progress. After the first week of October, the line turned downward; he could see very clearly how the "campaign" was going.

One who ministered to him asked if "he had thought of a life hereafter."

"It does not matter," he replied in a low voice. "No one knows."

Now his mind became befogged at last, and from time to time he sank into a coma. At the brief intervals when he was conscious he was placed in a chair by one of the tall windows of his bedroom, overlooking a great sweep of lawn and handsome beeches. Could he still see? Mina Edison was the last person he appeared to recognize. She bent over the pale invalid and placed her mouth to his ear. "Are you suffering?" she asked. "No, just waiting," he replied. Once he looked toward the window and the last audible words he uttered were: "It is very beautiful over there."

Newspaper reporters maintained a deathwatch in the vicinity of Glenmont day and night. The room upstairs was kept dark at night, with a nurse sitting beside the patient; if the lights went on—than all the world must be told. In the last hours many of Edison's laboratory associates waited in the hall downstairs, while Charles Edison would go up the great stairway, then down, to make his report. After his periodic visits to the sickroom, Charles used the same phrase spoken so long ago by the watchers at the Menlo Park laboratory in October 1879: "The light still burns."

On October 17 his pulse dropped steeply; in the early morning hours of Sunday the 18th, at 3:24 a.m., the lights of his room went on, and the doctors and nurse came out to announce the end. The electromagnetic telegraph, the telephone, the radio, with all of which his life had been bound up, flashed the news to all the corners of the world.

Some thought was given in high places to the idea of commemorating his passing in some unusual way. The President of the United States, it was proposed, should order all electric current to be turned off for a minute or two, in streets, factories, public places, and homes throughout the nation. But no sooner was the thought uttered than it was realized that such action was unthinkable. Owing to the very nature of Edison's contribution to the technical organization of modern society, his now so vital system of electric power distribution—the blood circulation of the community—would have been arrested; there was risk of incalculable disaster in halting, even for an instant, the great webs of transmission lines, and the whole monster mechanism of power that had grown in a half century out of his discoveries. The idea of a momentary "blackout" was therefore abandoned. Instead the President suggested that lights be dimmed for a few minutes where possible, as in private residences, at 10:00 p.m. of the day of Thomas A. Edison's funeral. Many paid this last tribute, silently, and then the lights were turned on again.

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THOMAS EDISON

From his childhood adventures as a newsboy on the midwestern rails, to his struggles to improve the science of telegraphy, to his transformative later inventions, Edison's life was an American saga whose impact is almost incalculable. Heartbreaking misfortune, breathtaking success, and a questing spirit that no amount of adversity could suppress—all characterized the inventor's life. His greatest invention, the incandescent lamp, banished darkness from the very night, but it was only one of hundreds of important discoveries credited to the man known as the Wizard of Menlo Park.

World's Greatest
BIOGRAPHIES

World's Greatest BIOGRAPHIES

ABRAHAM LINCOLN

1809–1865

With malice toward none, he sought to give the nation "a new birth of freedom."

WINSTON CHURCHILL

1874–1965

The early life of one of the twentieth century's most important figures, before the world knew him.

THOMAS EDISON

1847–1931

The Age of Technology dawned in the New Jersey lab of the Wizard of Menlo Park.